

STRUCTURE SEARCH

=> d his 183

(FILE 'HCAPLUS' ENTERED AT 13:51:18 ON 28 SEP 2009)
 L83 28 S L76 OR L79-L82
 SAV TEMP L83 BER519HCPA/A

=> d que stat 183
 L2 18 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON (100-60-7/BI
 OR 102-71-6/BI OR 108-91-8/BI OR 109-89-7/BI OR
 110-91-8/BI OR 111-42-2/BI OR 124-30-1/BI OR 124-68-5/B
 I OR 137107-41-6/BI OR 141-43-5/BI OR 35830-10-5/BI OR
 471-34-1/BI OR 534-18-9/BI OR 584-10-1/BI OR 75-04-7/BI
 OR 864970-32-1/BI OR 864970-33-2/BI OR 9003-04-7/BI)
 L4 STR

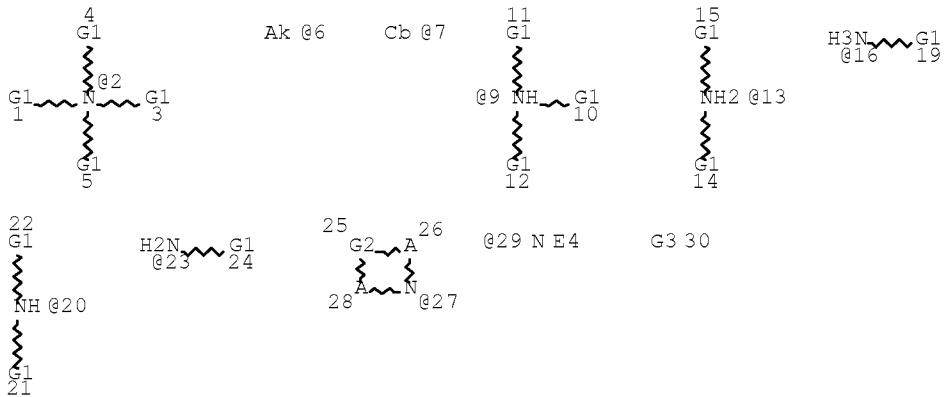


VAR G1=7/9/12
 NODE ATTRIBUTES:
 CONNECT IS E1 RC AT 4
 CONNECT IS E1 RC AT 5
 DEFAULT MLEVEL IS ATOM
 GGCAT IS UNS AT 9
 GGCAT IS UNS AT 12
 DEFAULT ECLEVEL IS LIMITED
 ECOUNT IS M1-X10 C AT 7
 ECOUNT IS M6 C AT 9
 ECOUNT IS M1-X4 C AT 11
 ECOUNT IS M6 C AT 12

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE
 L12 63799 SEA FILE=REGISTRY SSS FUL L4
 L13 626916 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON A1/PG
 L14 5826 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L12 AND L13
 L15 3961 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L12 AND
 ?AMMONIUM?/CNS
 L16 3901 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L12 AND
 ?AMINE/CNS
 L17 11353 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L12 AND
 ?SALT/CNS
 L18 878 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L16 AND L17
 L19 STR

10/594,519-309792-EIC SEARCH

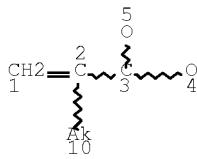


VAR G1=6/7
 REP G2=(0-5) A
 VAR G3=2/9/13/16/20/23/27/29/NH3
 NODE ATTRIBUTES:
 HCOUNT IS E4 AT 29
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

 GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 27

 STEREO ATTRIBUTES: NONE
 L21 22190 SEA FILE=REGISTRY SUB=L12 SSS FUL L4 AND L19
 L22 4666 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L15 OR L18
 L23 3023 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L16 NOT L18
 L24 15704 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L21
 L25 4369 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L22
 L26 1664 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L23
 L27 16554 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L24 OR L25
 L28 10 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L2 AND N/ELS

 L29 121064 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L28
 L30 16798 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L27 OR L26
 L31 329 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L29 AND L30
 L32 4618 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L25 OR L31
 L33 9577 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L14
 L35 117311 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L12
 L36 2127 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L35 AND L29
 L37 155818 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON AMINES/CT
 L38 2197 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L35 AND L37
 L39 3984 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L36 OR L38
 L40 8219 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L32 OR L38 OR L39
 L41 QUE SPE=ON ABB=ON PLU=ON HYDROSOLUBL? OR (HYDRO OR
 WATER OR H2O OR AQUEOUS) (A) SOLUBL?
 L42 912 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L40 AND L41
 L43 212 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L42 AND L29
 L44 147 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L42 AND L33
 L45 338 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L43 OR L44
 L46 QUE SPE=ON ABB=ON PLU=ON SUSPEN? OR DISPERS? OR COL
 LOID? OR EMULS? OR MICROEMULS? OR SLURR?
 L47 171 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L45 AND L46
 L48 STR



NODE ATTRIBUTES:

CONNECT IS E1 RC AT 4
 CONNECT IS E1 RC AT 5
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED
 ECOUNT IS M2-X6 C AT 10

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 6

STEREO ATTRIBUTES: NONE

L50 7985 SEA FILE=REGISTRY SUB=L12 SSS FUL L48
 L51 766 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L50 AND
 ?SODIUM?/CNS
 L52 7694 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L50 AND
 ACID/CNS
 L53 726 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L51
 L54 13203 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L52
 L55 8 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L47 AND L53
 L56 19 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L53 AND L45
 L57 23 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L54 AND L47
 L58 66 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L54 AND L45
 L59 150 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L50 AND
 ?POTASSIUM?/CNS
 L60 124 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L59
 L61 1 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L60 AND L47
 L62 4 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L60 AND L45
 L63 66 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON (L55 OR L56
 OR L57 OR L58) OR (L61 OR L62)
 L64 13321 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L50
 L65 351 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L64 AND L29
 L66 16 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L65 AND L47
 L67 42 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L65 AND L45
 L68 67 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L63 OR L66 OR
 L67
 L69 QUE SPE=ON ABB=ON PLU=ON PY=<2004 NOT P/DT
 L70 1 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L68 AND L69
 L71 QUE SPE=ON ABB=ON PLU=ON (PY=<2004 OR PRY=<2004 OR
 AY=<2004 OR MY=<2004 OR REVIEW/DT) AND P/DT
 L72 44 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L68 AND L71
 L73 45 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L70 OR L72
 L74 23 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L73 AND ((L55
 OR L56 OR L57) OR L66)
 L75 24 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L74 OR L70
 L76 24 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L75 AND L41
 L77 25685 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON DISPERSING
 AGENTS/CT
 L78 45 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L73 AND L41
 L79 3 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L78 AND L77
 L80 3 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L73 AND L77
 L81 4 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L66 AND L77
 L82 0 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L81 AND (L69
 OR L70)
 L83 28 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L76 OR (L79
 OR L80 OR L81 OR L82)

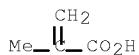
STRUCTURE SEARCH RESULTS

=> d 183 1-28 ibib ed abs hitstr hitind

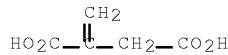
L83 ANSWER 1 OF 28 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2009:976516 HCAPLUS Full-text
 DOCUMENT NUMBER: 151:248179
 TITLE: Wetting and dispersing agent
 INVENTOR(S): Goebelt, Bernd; Nagel, Carsten; Omeis, Juergen; Meichsner, Marcus; Walter, Diana
 PATENT ASSIGNEE(S): BYK-Chemie GmbH, Germany
 SOURCE: PCT Int. Appl., 39pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
WO 2009098025	A1	20090813	WO 2009-EP699	2009 0203		
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM	DE 102008007713	A1	20090806	DE 2008-102008007713	2008 0204
PRIORITY APPLN. INFO.:					DE 2008-102008007713A	2008 0204

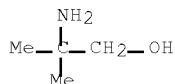
ED Entered STN: 14 Aug 2009
 AB The present invention relates to low-VOC mixts. of at least partially salted copolymers of at least one ethylenically unsatd., Ph group-containing monomer and at least one α,β -unsatd. monocarboxylic acid and/or at least one α,β -unsatd. dicarboxylic acid, of at least one water-soluble polyether, esterification products of at least one water-soluble polyether and an aliphatic dicarboxylic acid and a star polymer, obtainable by the esterification of a carboxylic acid comprising at least three carboxyl groups with at least one water-soluble polyether. The invention further relates to the use of a low-VOC mixture according to the invention as a wetting and dispersing agent, preferably for the production of low-VOC pigment pastes or low-VOC paint systems.
 IT 79-41-4D, Methacrylic acid, C1-C6 alkyl esters, and other derivs., copolymers with vinyl Ph group-containing monomers 97-65-4D, Itaconic acid, copolymers with vinyl Ph group-containing monomers 124-68-5, AMP 90
 RL: MOA (Modifier or additive use); USES (Uses) (wetting and dispersing agent for pigments)
 RN 79-41-4 HCAPLUS
 CN 2-Propenoic acid, 2-methyl- (CA INDEX NAME)



RN 97-65-4 HCPLUS
 CN Butanedioic acid, 2-methylene- (CA INDEX NAME)



RN 124-68-5 HCPLUS
 CN 1-Propanol, 2-amino-2-methyl- (CA INDEX NAME)



CC 42-5 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 38, 46, 48, 66
 ST wetting dispersing agent arom vinyl carboxylated polymer
 pigment lacquer; polyoxyalkylene ester wetting dispersing
 agent copolymer blend
 IT Amines
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (alkoxylated, tertiary diamines; wetting and dispersing
 agent for pigments)
 IT Vinyl compounds
 RL: MOA (Modifier or additive use); PRP (Properties); SPN
 (Synthetic preparation); PREP (Preparation); USES (Uses)
 (aryl, polymers; wetting and dispersing agent for
 pigments)
 IT Polymers
 RL: MOA (Modifier or additive use); PRP (Properties); SPN
 (Synthetic preparation); PREP (Preparation); USES (Uses)
 (block, diblock; wetting and dispersing agent for
 pigments)
 IT Vinyl compounds
 RL: MOA (Modifier or additive use); SPN (Synthetic preparation);
 PREP (Preparation); USES (Uses)
 (carboxy-containing, polymers, aromatic, alkali metal, alkaline earth
 metal, and ammonium salts; wetting and dispersing
 agent for pigments)
 IT Epoxides
 RL: MOA (Modifier or additive use); USES (Uses)
 (copolymers containing ethylene oxide; wetting and
 dispersing agent for pigments)
 IT Solutions
 (cosmetic, dispersants for solids for; wetting and
 dispersing agent for pigments)
 IT Anhydrides
 RL: MOA (Modifier or additive use); USES (Uses)
 (cyclic, α, β -unsatd., copolymers with vinyl Ph
 group-containing monomers; wetting and dispersing agent
 for pigments)

IT Polyethers
 RL: MOA (Modifier or additive use); USES (Uses)
 (di-Me siloxane-; wetting and dispersing agent for
 pigments)

IT Polysiloxanes
 RL: MOA (Modifier or additive use); USES (Uses)
 (di-Me, polyether-; wetting and dispersing agent for
 pigments)

IT Carboxylic acids
 RL: MOA (Modifier or additive use); USES (Uses)
 (dicarboxylic, esters, esters with water-sol
 . polyethers; wetting and dispersing agent for
 pigments)

IT Fatty acids
 RL: MOA (Modifier or additive use); USES (Uses)
 (dimer acids, from C12-C22 acids, esters with water-
 soluble polyethers; wetting and dispersing agent
 for pigments)

IT Cosmetics and personal care products

Inks
 (dispersants for pigments for; wetting and
 dispersing agent for pigments)

IT Cosmetic creams
 Cosmetic gels
 Cosmetic lotions
 Cosmetic sprays
 (dispersants for solids for; wetting and
 dispersing agent for pigments)

IT Carbon black
 RL: TEM (Technical or engineered material use); USES (Uses)
 (dispersions and lacquers containing; wetting and
 dispersing agent for pigments)

IT Polyethers
 RL: MOA (Modifier or additive use); USES (Uses)
 (esters of; wetting and dispersing agent for
 pigments)

IT Polyoxyalkylenes
 RL: MOA (Modifier or additive use); PRP (Properties); SPN
 (Synthetic preparation); PREP (Preparation); USES (Uses)
 (esters; wetting and dispersing agent for pigments)

IT Amines
 RL: MOA (Modifier or additive use); USES (Uses)
 (hydroxy-containing, water-soluble diesters;
 wetting and dispersing agent for pigments)

IT Lacquers
 Pastes
 (low-VOC, wetting agents and dispersants for; wetting
 and dispersing agent for pigments)

IT Luster
 (of dried lacquer films; wetting and dispersing agent
 for pigments)

IT Saponification
 (of hydroxy groups in polymers; wetting and dispersing
 agent for pigments)

IT Films
 Viscosity
 (of prepared lacquer; wetting and dispersing agent for
 pigments)

IT Amines
 RL: MOA (Modifier or additive use); USES (Uses)
 (polyamines, nonpolymeric, carboxylic acid-containing adducts,
 esters with water-soluble polyethers; wetting
 and dispersing agent for pigments)

IT Alcohols
 RL: MOA (Modifier or additive use); USES (Uses)
 (polyhydric, esters, carboxylic acid and amide-containing; wetting
 and dispersing agent for pigments)

IT Lactones
 RL: MOA (Modifier or additive use); USES (Uses)
 (polymers, C3-C10, copolymers containing ethylene oxide; wetting and dispersing agent for pigments)

IT Quaternary ammonium compounds
 RL: MOA (Modifier or additive use); SPN (Synthetic preparation);
 PREP (Preparation); USES (Uses)
 (polymers, alkoxylated quat. ammonium cations; wetting and dispersing agent for pigments)

IT Polymers
 RL: MOA (Modifier or additive use); SPN (Synthetic preparation);
 PREP (Preparation); USES (Uses)
 (star-branched, polyester; wetting and dispersing agent for pigments)

IT Fatty acids
 RL: MOA (Modifier or additive use); SPN (Synthetic preparation);
 PREP (Preparation); USES (Uses)
 (tall-oil, copolymers with Pluriol A 750 E; wetting and dispersing agent for pigments)

IT Fatty acids
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (tall-oil; wetting and dispersing agent for pigments)

IT Amides
 RL: MOA (Modifier or additive use); USES (Uses)
 (unsatd., polymers with Ph group-containing vinyl monomers; wetting and dispersing agent for pigments)

IT Carboxylic acids
 RL: MOA (Modifier or additive use); PRP (Properties); SPN
 (Synthetic preparation); PREP (Preparation); USES (Uses)
 (unsatd., polymers, mono- and di-basic acids; wetting and dispersing agent for pigments)

IT Fatty acids
 RL: MOA (Modifier or additive use); USES (Uses)
 (unsatd., trimers, from C12-C22 acids, esters with water-soluble polyethers; wetting and dispersing agent for pigments)

IT Dispersing agents
 Wetting
 Wetting agents
 (wetting and dispersing agent for pigments)

IT 9038-95-3, Pluriol A 2300PE
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (Pluriol A 2300PE; wetting and dispersing agent for pigments)

IT 147-14-8, Heliogen Blue L7101F 385388-55-6, Tronox CR 826
 RL: TEM (Technical or engineered material use); USES (Uses)
 (dispersions and lacquers containing; wetting and dispersing agent for pigments)

IT 654636-62-1, BlocBuilder
 RL: CAT (Catalyst use); USES (Uses)
 (to make diblock copolymer; wetting and dispersing agent for pigments)

IT 57-55-6, Propylene glycol, uses 57-57-8D, Propiolactone, copolymers containing ethylene oxide 75-21-8D, Ethylene oxide, copolymers, derivs. 79-10-7D, Acrylic acid, C1-C6 alkyl esters, and other derivs., copolymers with vinyl Ph group-containing monomers 79-41-4D, Methacrylic acid, C1-C6 alkyl esters, and other derivs., copolymers with vinyl Ph group-containing monomers 97-63-4D, Itaconic acid, copolymers with vinyl Ph group-containing monomers 97-65-4D, Itaconic acid, ester, amide, or other derivs., copolymers with vinyl Ph group-containing monomers 100-42-5D, Styrene, copolymers with carboxy-containing α,β -unsatd. carboxylic acid monomers and their derivs. 108-29-2D, copolymers containing ethylene oxide 108-30-5D, Succinic anhydride, esters with water-soluble polyethers or diols 108-31-6D, Maleic anhydride, copolymers with vinyl Ph

10/594,519-309792-EIC SEARCH

group-containing monomers 108-31-6D, Maleic anhydride, ester, amide, or other derivs., copolymers with vinyl Ph group-containing monomers, uses 110-16-7D, Maleic acid, copolymers with vinyl Ph group-containing monomers 110-16-7D, Maleic acid, ester, amide, or other derivs., copolymers with vinyl Ph group-containing monomers 110-17-8D, Fumaric acid, copolymers with vinyl Ph group-containing monomers 110-17-8D, Fumaric acid, ester, amide, or other derivs., copolymers with vinyl Ph group-containing monomers 122-60-1D, Phenyl glycidyl ether, copolymers containing ethylene oxide 124-68-8, AMP 90 502-44-3D, ϵ -Caprolactone, copolymers containing ethylene oxide 556-52-5D, Glycidol, ethers with up to C17 aliphatic and aromatic alcs., copolymers containing ethylene oxide 589-81-1D, 2-Ethylhexane, poly-oxiranylmethoxy derivs., copolymers containing ethylene oxide 937-41-7D, Phenyl acrylate, copolymers with carboxy-containing α,β -unsatd. carboxylic acid monomers and their derivs. 2426-08-6D, n-Butyl glycidyl ether, copolymers containing ethylene oxide 2495-35-4D, Benzyl acrylate, copolymers with carboxy-containing α,β -unsatd. carboxylic acid monomers and their derivs. 2495-37-6D, Benzyl methacrylate, copolymers with carboxy-containing α,β -unsatd. carboxylic acid monomers and their derivs. 4016-14-2D, Isopropyl glycidyl ether, copolymers containing ethylene oxide 9003-11-6, Ethylene oxide-propylene oxide copolymer 25265-77-4, Texanol 25867-06-5, Ethylene oxide-styrene oxide copolymer 27517-34-6, Ethylene oxide-butylene oxide copolymer 172867-85-5, Tafigel PUR 40 192140-50-4, Byk 024 272772-61-9, Parmetol A 26 294653-16-0, Byk 028

RL: MOA (Modifier or additive use); USES (Uses)
(wetting and dispersing agent for pigments)

IT 9011-13-6P, Styrene-maleic anhydride copolymer 120293-17-6P

RL: MOA (Modifier or additive use); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(wetting and dispersing agent for pigments)

IT 9004-74-4DP, Pluriol A 750 E, ester reaction products with Priol 1022 or tall oil fatty acids 9011-13-6DP, Styrene-maleic anhydride copolymer, sodium or potassium or diaminopropylamine or alkoxylated quaternary ammonium salts 9038-95-3DP, ester reaction products with Priol 1022 105187-99-3DP, Priol 1022, ester reaction products with Pluriol A 750 E or Pluriol A 2300PE 709024-68-0DP, Acrylic acid-styrene diblock copolymer, potassium salts 862736-37-6P

RL: MOA (Modifier or additive use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(wetting and dispersing agent for pigments)

IT 632340-34-2, Mowilith LDM 7416

RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)
(wetting and dispersing agent for pigments)

IT 9004-74-4, Pluriol A 750 E 37960-66-0, 1,1,3-Propanetriamine 105187-99-3, Priol 1022

RL: RCT (Reactant); RACT (Reactant or reagent)
(wetting and dispersing agent for pigments)

IT 1310-58-3, Potassium hydroxide, reactions 1310-73-2, Sodium hydroxide, reactions

RL: RGT (Reagent); RACT (Reactant or reagent)
(wetting and dispersing agent for pigments)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L83 ANSWER 2 OF 28 HCPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:940622 HCPLUS Full-text

DOCUMENT NUMBER: 151:248176

TITLE: Wetting and dispersing agent

INVENTOR(S): Goebelt, Bernd; Nagel, Carsten; Omeis,

10/594,519-309792-EIC SEARCH

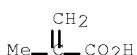
PATENT ASSIGNEE(S): Juergen; Meichsner, Marcus; Walter, Diana
 BYK-Chemie G.m.b.H., Germany
 SOURCE: Ger. Offen., 18pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 102008007713	A1	20090806	DE 2008-102008007713	2008 0204
WO 2009098025	A1	20090813	WO 2009-EP699	2009 0203

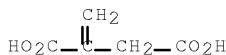
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW,
 BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ,
 EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU,
 ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC,
 LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX,
 MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS,
 RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN,
 TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR,
 HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL,
 PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
 GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW,
 MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ,
 MD, RU, TJ, TM

PRIORITY APPLN. INFO.: DE 2008-102008007713A
 2008
0204

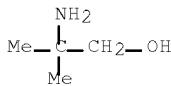
ED Entered STN: 06 Aug 2009
 AB The present invention concerns VOC-poor mixts. of at least partially salted copolymers of at least one ethylenically unsatd., Ph group-containing monomer and at least one α , β -unsatd. monocarboxylic acid and/or at least one α , β -unsatd. dicarboxylic acid, of at least one water-soluble Polyether, transesterification products of at least one water-soluble Polyether and an aliphatic dicarboxylic acid and a star polymer, obtainable by transesterification of one, at least 3 carboxyl groups of an exhibiting carboxylic acid with at least one water-soluble Polyether as well as the use of a mixture, according to the invention, as wetting and dispersing agents, preferably for the production of VOC-poor pigment pastes or VOC-poor lacquer systems.
 IT 79-41-40, Methacrylic acid, derivs., copolymers with vinyl Ph group-containing monomers 97-65-40, Itaconic acid, copolymers with vinyl Ph group-containing monomers 124-68-5, AMP 90
 RL: MOA (Modifier or additive use); USES (Uses)
 (wetting and dispersing agent for pigments)
 RN 79-41-4 HCPLUS
 CN 2-Propenoic acid, 2-methyl- (CA INDEX NAME)



RN 97-65-4 HCPLUS
 CN Butanedioic acid, 2-methylene- (CA INDEX NAME)



RN 124-68-5 HCAPLUS
 CN 1-Propanol, 2-amino-2-methyl- (CA INDEX NAME)



CC 42-5 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 38, 46, 48, 66
 ST wetting dispersing agent arom vinyl carboxylated polymer
 pigment lacquer; polyoxyalkylene ester wetting dispersing
 agent copolymer blend
 IT Amines
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (alkoxylated, tertiary diamines; wetting and dispersing
 agent for pigments)
 IT Vinyl compounds
 RL: MOA (Modifier or additive use); PRP (Properties); SPN
 (Synthetic preparation); PREP (Preparation); USES (Uses)
 (aryl, polymers; wetting and dispersing agent for
 pigments)
 IT Polymers
 RL: MOA (Modifier or additive use); PRP (Properties); SPN
 (Synthetic preparation); PREP (Preparation); USES (Uses)
 (block, diblock; wetting and dispersing agent for
 pigments)
 IT Vinyl compounds
 RL: MOA (Modifier or additive use); SPN (Synthetic preparation);
 PREP (Preparation); USES (Uses)
 (carboxy-containing, polymers, aromatic, alkali metal, alkaline earth
 metal, and ammonium salts; wetting and dispersing
 agent for pigments)
 IT Epoxides
 RL: MOA (Modifier or additive use); USES (Uses)
 (copolymers containing ethylene oxide; wetting and
 dispersing agent for pigments)
 IT Solutions
 (cosmetic, dispersants for solids for; wetting and
 dispersing agent for pigments)
 IT Anhydrides
 RL: MOA (Modifier or additive use); USES (Uses)
 (cyclic, α, β -unsatd., copolymers with vinyl Ph
 group-containing monomers; wetting and dispersing agent
 for pigments)
 IT Polyethers
 RL: MOA (Modifier or additive use); USES (Uses)
 (di-Me siloxane-, Byk 348; wetting and dispersing
 agent for pigments)
 IT Polysiloxanes
 RL: MOA (Modifier or additive use); USES (Uses)
 (di-Me, polyether-, Byk 348; wetting and dispersing
 agent for pigments)
 IT Carboxylic acids
 RL: MOA (Modifier or additive use); USES (Uses)
 (dicarboxylic, esters, esters with water-sol
 . polyethers; wetting and dispersing agent for

IT pigments)
 IT Fatty acids
 RL: MOA (Modifier or additive use); USES (Uses)
 (dimer acids, from C12-C22 acids, esters with water-soluble polyethers; wetting and dispersing agent for pigments)
 IT Cosmetics and personal care products
 Inks
 (dispersants for pigments for; wetting and dispersing agent for pigments)
 IT Cosmetic creams
 Cosmetic gels
 Cosmetic lotions
 Cosmetic sprays
 (dispersants for solids for; wetting and dispersing agent for pigments)
 IT Carbon black
 RL: TEM (Technical or engineered material use); USES (Uses)
 (dispersions and lacquers containing; wetting and dispersing agent for pigments)
 IT Polyethers
 RL: MOA (Modifier or additive use); USES (Uses)
 (esters of; wetting and dispersing agent for pigments)
 IT Polyoxalkylenes
 RL: MOA (Modifier or additive use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
 (esters; wetting and dispersing agent for pigments)
 IT Amines
 RL: MOA (Modifier or additive use); USES (Uses)
 (hydroxy-containing, water-soluble diesters; wetting and dispersing agent for pigments)
 IT Lacquers
 Pastes
 (low-VOC, wetting agents and dispersants for; wetting and dispersing agent for pigments)
 IT Luster
 (of dried lacquer films; wetting and dispersing agent for pigments)
 IT Saponification
 (of hydroxy groups in polymers; wetting and dispersing agent for pigments)
 IT Films
 Viscosity
 (of prepared lacquer; wetting and dispersing agent for pigments)
 IT Amines
 RL: MOA (Modifier or additive use); USES (Uses)
 (polyamines, nonpolymeric, carboxylic acid-containing adducts, esters with water-soluble polyethers; wetting and dispersing agent for pigments)
 IT Alcohols
 RL: MOA (Modifier or additive use); USES (Uses)
 (polyhydric, esters, carboxylic acid and amide-containing; wetting and dispersing agent for pigments)
 IT Lactones
 RL: MOA (Modifier or additive use); USES (Uses)
 (polymers, C3-C10, copolymers containing ethylene oxide; wetting and dispersing agent for pigments)
 IT Quaternary ammonium compounds
 RL: MOA (Modifier or additive use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
 (polymers, alkoxylated quat. ammonium cations; wetting and dispersing agent for pigments)
 IT Polymers
 RL: MOA (Modifier or additive use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(star-branched, polyester; wetting and dispersing agent for pigments)

IT Fatty acids
 RL: MOA (Modifier or additive use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
 (tall-oil, copolymers with Pluriol A 750 E; wetting and dispersing agent for pigments)

IT Fatty acids
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (tall-oil; wetting and dispersing agent for pigments)

IT Amides
 RL: MOA (Modifier or additive use); USES (Uses)
 (unsatd., polymers with Ph group-containing vinyl monomers; wetting and dispersing agent for pigments)

IT Carboxylic acids
 RL: MOA (Modifier or additive use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
 (unsatd., polymers, mono- and di-basic acids; wetting and dispersing agent for pigments)

IT Fatty acids
 RL: MOA (Modifier or additive use); USES (Uses)
 (unsatd., trimers, from C12-C22 acids, esters with water-soluble polyethers; wetting and dispersing agent for pigments)

IT Dispersing agents
 Wetting
 Wetting agents
 (wetting and dispersing agent for pigments)

IT 147-14-8, Heliogen Blue L7101F 385388-55-6, Tronox CR 826
 RL: TEM (Technical or engineered material use); USES (Uses)
 (dispersions and lacquers containing; wetting and dispersing agent for pigments)

IT 654636-62-1, BlocBuilder
 RL: CAT (Catalyst use); USES (Uses)
 (to make diblock copolymer; wetting and dispersing agent for pigments)

IT 57-55-6, Propylene glycol, uses 75-21-8D, Ethylene oxide, copolymers, derivs. 79-10-7D, Acrylic acid, derivs., copolymers with vinyl Ph group-containing monomers 79-41-4D, Methacrylic acid, derivs., copolymers with vinyl Ph group-containing monomers 97-65-4D, Itaconic acid, copolymers with vinyl Ph group-containing monomers 97-65-4D, Itaconic acid, ester, amide, or other derivs., copolymers with vinyl Ph group-containing monomers 100-42-5D, Styrene, copolymers with carboxy-containing α,β -unsatd. carboxylic acid monomers and their derivs. 108-30-5D, Succinic anhydride, esters with water-soluble polyethers or diols 108-31-6D, Maleic anhydride, copolymers with vinyl Ph group-containing monomers 108-31-6D, Maleic anhydride, ester, amide, or other derivs., copolymers with vinyl Ph group-containing monomers, uses 110-16-7D, Maleic acid, copolymers with vinyl Ph group-containing monomers 110-16-7D, Maleic acid, ester, amide, or other derivs., copolymers with vinyl Ph group-containing monomers 110-17-8D, Fumaric acid, copolymers with vinyl Ph group-containing monomers 110-17-8D, Fumaric acid, ester, amide, or other derivs., copolymers with vinyl Ph group-containing monomers 122-60-1D, Phenyl glycidyl ether, copolymers containing ethylene oxide 124-68-3, AMP 90 556-52-5D, Glycidol, ethers with up to C17 aliphatic and aromatic alcs., copolymers containing ethylene oxide 589-81-1D, 2-Ethylhexane, poly-oxiranylmethoxy derivs., copolymers containing ethylene oxide 937-41-7D, Phenyl acrylate, copolymers with carboxy-containing α,β -unsatd. carboxylic acid monomers and their derivs. 2426-08-6D, n-Butyl glycidyl ether, copolymers containing ethylene oxide 2495-35-4D, Benzyl acrylate, copolymers with carboxy-containing α,β -unsatd. carboxylic acid monomers and their derivs. 2495-37-6D, Benzyl methacrylate, copolymers with

carboxy-containing α,β -unsatd. carboxylic acid monomers and their derivs. 4016-14-2D, Isopropyl glycidyl ether, copolymers containing ethylene oxide 9003-11-6, Ethylene oxide-propylene oxide copolymer 25265-77-4, Texanol 25867-06-5, Ethylene oxide-styrene oxide copolymer 27517-34-6, Ethylene oxide-butylene oxide copolymer 172867-85-5, Tafigel PUR 40 192140-50-4, Byk 024 272772-61-9, Parmetol A 26 294653-16-0, Byk 028

RL: MOA (Modifier or additive use); USES (Uses)
(wetting and dispersing agent for pigments)

IT 9011-13-6P, Styrene-maleic anhydride copolymer 120293-17-6P

RL: MOA (Modifier or additive use); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(wetting and dispersing agent for pigments)

IT 9004-74-4DP, Pluriol A 750 E, ester reaction products with Pripol 1022 or tall oil fatty acids 9011-13-6DP, Styrene-maleic anhydride copolymer, sodium or potassium or diaminopropylamine or alkoxylated quaternary ammonium salts 9038-95-3DP, ester reaction products with Pripol 1022 105187-99-3DP, Pripol 1022, ester reaction products with Pluriol A 750 E or Pluriol A2300PE 709024-68-0DP, Acrylic acid-styrene diblock copolymer, potassium salts 862736-37-6P

RL: MOA (Modifier or additive use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(wetting and dispersing agent for pigments)

IT 632340-34-2, Mowilith LDM 7416

RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)
(wetting and dispersing agent for pigments)

IT 9004-74-4, Pluriol A 750 E 9038-95-3 37960-66-0, 1,1,3-Propanetriamine 105187-99-3, Pripol 1022

RL: RCT (Reactant); RACT (Reactant or reagent)
(wetting and dispersing agent for pigments)

IT 1310-58-3, Potassium hydroxide, reactions 1310-73-2, Sodium hydroxide, reactions

RL: RGT (Reagent); RACT (Reactant or reagent)
(wetting and dispersing agent for pigments)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L83 ANSWER 3 OF 28 HCPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2008:1194538 HCPLUS Full-text
DOCUMENT NUMBER: 149:495900
TITLE: Method for preparation of polymer ceramic dispersant
INVENTOR(S): Wang, Haihua; Shen, Yiding; Fei, Guiqiang; Li, Xiaorui
PATENT ASSIGNEE(S): Shaanxi University of Science and Technology, Peop. Rep. China
SOURCE: Faming Zhanli Shenqing Gongkai Shuomingshu, 13pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	

CN 101274242	A	20081001	CN 2008-10017258	2008 0108

PRIORITY APPLN. INFO.: CN 2008-10017258

2008
0108

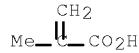
ED Entered STN: 06 Oct 2008

AB The title method comprises mixing polyethylene glycol and maleic anhydride with the molar ratio of 1:0.1-1.2 to obtain solution A, adding acidic solution into solution A with the solid weight ratio of 0.5-10:100, heating to 30-90° for 0.5-4 h to obtain esterification product B, mixing the product B, functional monomer and vinyl monomer with the weight ratio of 1:(1-10):(0.1-1.5) to obtain monomer solution C, mixing the solution C, a mol.-weight regulator and water with the weight ratio of 1:(0-0.5):(1-10) to obtain monomer solution D, mixing water and water-soluble initiator with the weight ratio of 1:(0.002-1) to obtain an initiator water solution E, adding the solution E into the solution D at 40-90° with the weight ratio of 100:(0.05-20) for 0.1-4 h, adjusting to 50-95° to react for 1-6 h to obtain copolymer water solution F, and adjusting pH to 7-13 to obtain polymer ceramic dispersant. The acidic solution is from sulfuric acid, formic acid, acetic acid, and/or oxalic acid. The mol.-weight regulator is dodecyl mercaptan, ethanethiol, triethanolamine, or isopropanol. The title method may decrease the cost, and improve the d. and flexural strength of ceramic product. The title polymer ceramic dispersant may be used for dispersing pigment and paint.

IT 79-41-4, Methacrylic acid, reactions 97-65-4
, Itaconic acid, reactions 27813-02-1, Hydroxypropyl
methacrylate
RL: RCT (Reactant); RACT (Reactant or reagent)
(method for preparation of polymer ceramic dispersant)

RN 79-41-4 HCPLUS

CN 2-Propenoic acid, 2-methyl- (CA INDEX NAME)



RN 97-65-4 HCPLUS

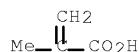
CN Butanedioic acid, 2-methylene- (CA INDEX NAME)



RN 27813-02-1 HCPLUS

CN 2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (CA INDEX NAME)

CM 1

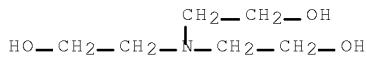
CRN 79-41-4
CMF C4 H6 O2

CM 2

CRN 57-55-6
CMF C3 H8 O2



IT 102-71-6, Triethanolamine, reactions
 RL: RGT (Reagent); RACT (Reactant or reagent)
 (mol. weight regulator; method for preparation of polymer ceramic dispersant)
 RN 102-71-6 HCPLUS
 CN Ethanol, 2,2',2'''-nitrilotris- (CA INDEX NAME)



CC 48-1 (Unit Operations and Processes)
 ST polymer ceramic dispersant prepn polymn PEG maleic anhydride
 IT Ceramics
 Dispersing agents
 Esterification
 Polymerization
 (method for preparation of polymer ceramic dispersant)
 IT Polyoxalkylenes, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (method for preparation of polymer ceramic dispersant)
 IT 7631-90-5, Sodium bisulfite 7727-21-1, Potassium persulfate
 7727-54-0, Ammonium persulfate 7757-83-7, Sodium sulfite
 7772-98-7, Sodium thiosulfate
 RL: CAT (Catalyst use); USES (Uses)
 (initiator; method for preparation of polymer ceramic dispersant)
 IT 75-50-3, Trimethylamine, uses 121-44-8, Triethylamine, uses
 144-55-8, Sodium bicarbonate, uses 497-19-8, Sodium carbonate,
 uses 1310-58-3, Potassium hydroxide, uses 1310-73-2, Sodium
 hydroxide, uses 7664-41-7, Ammonia, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (method for preparation of polymer ceramic dispersant)
 IT 64-18-6, Formic acid, reactions 64-19-7, Acetic acid, reactions
 79-10-7, Acrylic acid, reactions 79-41-4, Methacrylic acid, reactions
 80-62-6, Methyl methacrylate 96-33-3, Methyl acrylate 97-63-2, Ethyl methacrylate 97-63-4,
 Itaconic acid, reactions 97-88-1, Butyl methacrylate 98-11-3D,
 Benzenesulfonic acid, alkyl derivs. 98-83-9, Methylstyrene, reactions
 100-42-5, Styrene, reactions 108-31-6, Maleic anhydride, reactions
 140-88-5, Ethyl acrylate 141-32-2, Butyl acrylate 142-09-6, Hexyl methacrylate 144-62-7, Oxalic acid, reactions
 818-61-1 868-77-9 1606-80-0, Allylsulfonic acid 2499-95-8, Hexyl acrylate 3934-16-5, Methallylsulfonic acid 4813-57-4, Octadecyl acrylate 7664-93-9, Sulfuric acid, reactions
 25322-68-3, PEG 1000 25584-83-2, Hydroxypropyl acrylate 27813-02-1, Hydroxypropyl methacrylate 32360-05-7, Octadecyl methacrylate
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (method for preparation of polymer ceramic dispersant)
 IT 67-63-0, Isopropanol, reactions 75-08-1, Ethanethiol 102-71-6, Triethanolamine, reactions 112-55-0, Dodecyl mercaptan
 RL: RGT (Reagent); RACT (Reactant or reagent)
 (mol. weight regulator; method for preparation of polymer ceramic

dispersant)

L83 ANSWER 4 OF 28 HCPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2007:675510 HCPLUS Full-text
 DOCUMENT NUMBER: 147:96074
 TITLE: Production of water-soluble anionic polymer dispersions
 INVENTOR(S): Han, Sung Wook; Lee, Seung Chul
 PATENT ASSIGNEE(S): Green Technology, Inc., S. Korea; Taki Chemical Co., Ltd.
 SOURCE: PCT Int. Appl., 45pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
WO 2007069857	A1	20070621	WO 2006-KR5449	2006 1214
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM	KR 2007064120	A	20070620 KR 2005-124706 2005 1216
KR 811212	B1	20080307		
US 20070142519	A1	20070621	US 2006-638541	2006 1214
PRIORITY APPLN. INFO.:			KR 2005-124706	A 2005 1216

ED Entered STN: 22 Jun 2007

AB A water-soluble anionic polymer dispersion comprises a radical copolymer comprising an anionic monomer and a nonionic monomer and prepared in salt-containing water in the presence of an ionic dispersant, a radical polymerization initiator, and an anionic surfactant or nonionic surfactant. The anionic polymer dispersion has high solids content, high polymer mol. weight, and low viscosity of the reaction mixture and the final product. Thus, a 50%-aqueous acrylamide solution (101.718), 99% 2-acrylamide-2-methyl-1-propanesulfonic acid (131.058), 99% itaconic acid (19.589), 15% poly(sodium acrylate) (53.333), Noigen ET 135 surfactant (4.0), glycerol (6.0), ammonium sulfate (208.444), and deionized water (420.301 g) were mixed in a reactor, the reactor was purged with nitrogen for 20 min, and the temperature was set at 35°. The polymerization was initiated by adding 1.0 g of a 2%-aqueous VA 044 initiator, the polymerization was carried out for 6 h, the same amount of VA 044 initiator was added again, the polymerization was carried out for addnl. 12 h, and ammonium sulfate (55.556 g) was added to obtain a water-soluble anionic polymer dispersion having an average particle size of 7 μ and a viscosity of 57 cps.

IT 102-71-6, Triethanolamine, uses

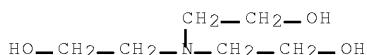
RL: CAT (Catalyst use); USES (Uses)

(production of water-soluble anionic polymer

dispersions)

RN 102-71-6 HCPLUS

CN Ethanol, 2,2',2''-nitrilotris- (CA INDEX NAME)

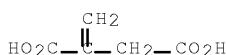


IT 38808-69-4P, Acrylamide-acrylic acid-itaconic acid copolymer 115426-14-7P 942054-57-1P, Acrylamide-2-acrylamide-2-methylpropanesulfonic acid-itaconic acid-sodium acrylate copolymer 942054-58-2P, Acrylamide-2-acrylamide-2-methylpropanesulfonic acid-acrylic acid-itaconic acid-sodium acrylate copolymer 942054-59-3P 942054-60-6P 942054-61-7P
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (production of water-soluble anionic polymer dispersions)

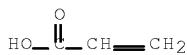
RN 38808-69-4 HCPLUS

CN Butanedioic acid, 2-methylene-, polymer with 2-propenamide and 2-propenoic acid (CA INDEX NAME)

CM 1

CRN 97-65-4
CMF C5 H6 O4

CM 2

CRN 79-10-7
CMF C3 H4 O2

CM 3

CRN 79-06-1
CMF C3 H5 N O

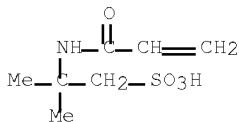
RN 115426-14-7 HCPLUS

10/594,519-309792-EIC SEARCH

CN Butanedioic acid, 2-methylene-, polymer with
2-methyl-2-[(1-oxo-2-propen-1-yl)amino]-1-propanesulfonic acid and
2-propenamide (CA INDEX NAME)

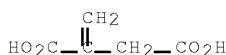
CM 1

CRN 15214-89-8
CMF C7 H13 N O4 S



CM 2

CRN 97-65-4
CMF C5 H6 O4



CM 3

CRN 79-06-1
CMF C3 H5 N O

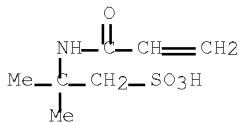


RN 942054-57-1 HCAPLUS

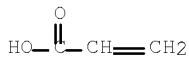
CN Butanedioic acid, 2-methylene-, polymer with
2-methyl-2-[(1-oxo-2-propen-1-yl)amino]-1-propanesulfonic acid,
2-propenamide and sodium 2-propenoate (1:1) (CA INDEX NAME)

CM 1

CRN 15214-89-8
CMF C7 H13 N O4 S

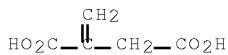


CM 2

CRN 7446-81-3
CMF C3 H4 O2 . Na

● Na

CM 3

CRN 97-65-4
CMF C5 H6 O4

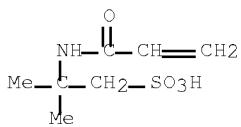
CM 4

CRN 79-06-1
CMF C3 H5 N O

RN 942054-58-2 HCAPLUS

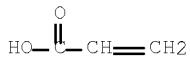
CN Butanedioic acid, 2-methylene-, polymer with
2-methyl-2-[(1-oxo-2-propen-1-yl)amino]-1-propanesulfonic acid,
2-propenamide, 2-propenoic acid and sodium 2-propenoate (1:1) (CA
INDEX NAME)

CM 1

CRN 15214-89-8
CMF C7 H13 N O4 S

CM 2

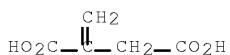
CRN 7446-81-3
 CMF C3 H4 O2 . Na



● Na

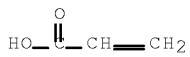
CM 3

CRN 97-65-4
 CMF C5 H6 O4



CM 4

CRN 79-10-7
 CMF C3 H4 O2



CM 5

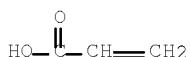
CRN 79-06-1
 CMF C3 H5 N O



RN 942054-59-3 HCPLUS
 CN Butanedioic acid, 2-methylene-, polymer with 2-propenamide and
 sodium 2-propenoate (1:1) (CA INDEX NAME)

CM 1

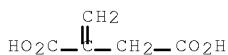
CRN 7446-81-3
 CMF C3 H4 O2 . Na



● Na

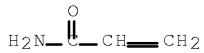
CM 2

CRN 97-65-4
CMF C5 H6 O4



CM 3

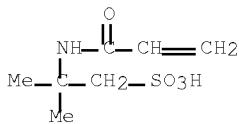
CRN 79-06-1
CMF C3 H5 N O



RN 942054-60-6 HCPLUS
CN Butanedioic acid, 2-methylene-, polymer with
2-methyl-2-[(1-oxo-2-propen-1-yl)amino]-1-propanesulfonic acid,
2-propenamide and 2-propenoic acid (CA INDEX NAME)

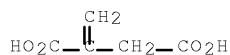
CM 1

CRN 15214-89-8
CMF C7 H13 N O4 S

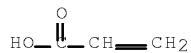


CM 2

CRN 97-65-4
CMF C5 H6 O4



CM 3

CRN 79-10-7
CMF C3 H4 O2

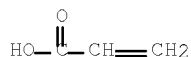
CM 4

CRN 79-06-1
CMF C3 H5 N O

RN 942054-61-7 HCAPLUS

CN Butanedioic acid, 2-methylene-, polymer with 2-propenamide,
2-propenoic acid and sodium 2-propenoate (1:1) (CA INDEX NAME)

CM 1

CRN 7446-81-3
CMF C3 H4 O2 . Na

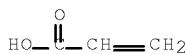
● Na

CM 2

CRN 97-65-4
CMF C5 H6 O4

10/594,519-309792-EIC SEARCH

CM 3

CRN 79-10-7
CMF C3 H4 O2

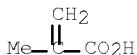
CM 4

CRN 79-06-1
CMF C3 H5 N O

IT 25086-62-8, Sodium methacrylate homopolymer
 25087-26-7, Poly(methacrylic acid)
 RL: NUU (Other use, unclassified); USES (Uses)
 (production of water-soluble anionic polymer
 dispersions)

RN 25086-62-8 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, sodium salt (1:1), homopolymer (CA
 INDEX NAME)

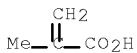
CM 1

CRN 5536-61-8
CMF C4 H6 O2 . Na

● Na

RN 25087-26-7 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, homopolymer (CA INDEX NAME)

CM 1

CRN 79-41-4
CMF C4 H6 O2

CC 35-4 (Chemistry of Synthetic High Polymers)

ST radical polymn water soluble anionic acrylic polymer dispersion

IT Alcohols, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (C12-14-branched, ethoxylated, Noigen ET 135; production of water-soluble anionic polymer dispersions)

IT Polyoxyalkylenes, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (alkyl group-terminated; production of water-sol. anionic polymer dispersions)

IT Polyoxyalkylenes, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (alkylphenyl group-terminated; production of water-soluble anionic polymer dispersions)

IT Polyelectrolytes
 Surfactants
 (anionic; production of water-soluble anionic polymer dispersions)

IT Polymerization
 (emulsion, radical; production of water-soluble anionic polymer dispersions)

IT Lanolin
 RL: NUU (Other use, unclassified); USES (Uses)
 (ethoxylated; production of water-soluble anionic polymer dispersions)

IT Surfactants
 (nonionic; production of water-soluble anionic polymer dispersions)

IT Carboxylic acids, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (polycarboxylic, salts; production of water-sol. anionic polymer dispersions)

IT Carboxylic acids, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (polycarboxylic; production of water-soluble anionic polymer dispersions)

IT Disperse systems
 Dispersing agents
 (production of water-soluble anionic polymer dispersions)

IT Polyoxyalkylenes, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (production of water-soluble anionic polymer dispersions)

IT Polymerization catalysts
 (radical; production of water-soluble anionic polymer dispersions)

IT Polymers, preparation
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (water-soluble; production of water-soluble anionic polymer dispersions)

IT 9004-32-4, Cellogen NB-P
 RL: NUU (Other use, unclassified); USES (Uses)
 (Cellogen 5A; production of water-soluble anionic polymer dispersions)

IT 2997-92-4, 2,2'-Azobis(2-amidinopropane) dihydrochloride
 RL: CAT (Catalyst use); USES (Uses)
 (V 50; production of water-soluble anionic polymer dispersions)

IT 102-71-6, Triethanolamine, uses 110-18-9,
 N,N,N',N'-Tetramethylethylenediamine 7631-90-5, Sodium bisulfite
 7722-84-1, Hydrogen peroxide, uses 7727-21-1, Potassium
 persulfate 7727-54-0, Ammonium persulfate 7757-83-7, Sodium
 sulfite 7772-98-7, Sodium thiosulfate 7775-27-1, Sodium
 persulfate 15545-97-8, 2,2'-Azobis(4-methoxy-2,4-
 dimethyl)valeronitrile 27776-21-2, VA 044 942054-56-0

RL: CAT (Catalyst use); USES (Uses)
 (production of water-soluble anionic polymer
 dispersions)

IT 9003-06-9P, Acrylamide-acrylic acid copolymer 25085-02-3P,
 Acrylamide-sodium acrylate copolymer 38808-69-4P,
 Acrylamide-acrylic acid-itaconic acid copolymer 40623-73-2P
 62649-23-4P, Acrylamide-acrylic acid-sodium acrylate copolymer
 78474-98-3P, Acrylamide-2-acrylamide-2-methylpropanesulfonic
 acid-acrylic acid copolymer 84233-77-2P 115426-14-7P
 514225-71-9P 942054-57-1P,
 Acrylamide-2-acrylamide-2-methylpropanesulfonic acid-itaconic
 acid-sodium acrylate copolymer 942054-58-2P,
 Acrylamide-2-acrylamide-2-methylpropanesulfonic acid-acrylic
 acid-itaconic acid-sodium acrylate copolymer
 942054-59-3P 942054-60-6P
 942054-61-7P
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (production of water-soluble anionic polymer
 dispersions)

IT 7647-14-5, Sodium chloride, uses 7757-82-6, Sodium sulfate, uses
 7783-20-2, Ammonium sulfate, uses 9003-01-4, Poly(acrylic acid)
 9003-04-7, Poiz 530 9003-11-6D, Ethylene oxide-propylene oxide
 copolymer, ethers 9005-38-3, Sodium alginate 9016-45-9
 9086-60-6, Ammonium carboxymethyl cellulose 12125-02-9, Ammonium
 chloride, uses 12778-04-0, Noigen EA 141 25086-62-8,
 Sodium methacrylate homopolymer 25087-26-7,
 Poly(methacrylic acid) 25322-68-3D, Poly(ethylene glycol),
 alkylphenyl or alkyl ethers 25549-84-2, Sodium acrylate
 homopolymer 27119-07-9, Poly(2-acrylamide-2-
 methylpropanesulfonic acid) 35545-57-4, Solspers 27000
 60472-42-6, Poiz 520 60472-42-6, Poiz 521 83847-31-8, Poiz
 532A 109265-72-7, Solspers 20000 286956-86-3, Solspers 24000
 656236-92-9, Solspers 43000 880082-76-8, Solspers 44000
 942205-64-3, Noigen ET 89 942205-66-5, Ramigen ET 20
 942206-40-8, Noigen EA 135 942206-50-0, CA 100 (surfactant)
 RL: NUU (Other use, unclassified); USES (Uses)
 (production of water-soluble anionic polymer
 dispersions)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE
 FOR THIS RECORD. ALL CITATIONS AVAILABLE
 IN THE RE FORMAT

L83 ANSWER 5 OF 28 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2006:121602 HCAPLUS Full-text
 DOCUMENT NUMBER: 144:194033
 TITLE: Manufacture of deinked pulp and additives
 therefor
 INVENTOR(S): Fujiwara, Takahiro; Nakada, Tomohiko;
 Hashiguchi, Yoshiharu
 PATENT ASSIGNEE(S): Harima Chemicals, Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	

JP 2006037290	A	20060209	JP 2004-221108	2004 0729
				<--
PRIORITY APPLN. INFO.:			JP 2004-221108	2004 0729

<--

ED Entered STN: 09 Feb 2006

AB Deinked pulp is manufactured by addition of H_2O -soluble amphoteric copolymers with M_w 500,000-10,000,000 prepared by polymerization of (meth)acrylamide, cationic monomers, and anionic monomers to a pulp slurry after a flotation process and before dehydration of deinked pulp slurry, so that yield of ash content containing fillers derived from wastepaper can be improved. The cationic monomer of the additives is bis(quaternary ammonium salt)-containing (meth)acrylamide prepared by reaction of dimethylaminopropylacrylamide with 1-chloro-2-hydroxypropyltrimethylammonium chloride. Thus, an aqueous 50% acrylamide solution 114, an aqueous 80% acrylic acid solution 4.33, dimethylaminoethyl methacrylate 7.55, and methylenebisacrylamide 0.02 g were polymerized at 90° and pH 3.0 in $\text{Me}_2\text{CHOH}/\text{H}_2\text{O}$ mixture in the presence of ammonium persulfate and further polymerized with addnl. 50% acrylamide solution 35.8, 80% acrylic acid solution 2.16, and dimethylaminoethyl methacrylate 3.77 g to give a 20.5% solid amphoteric polymer (M_w 2,800,000) solution. A 1% aqueous wastepaper pulp was deinked with deinking agent (Haritop P 100K) by a flotation method, mixed with 0.1% (to pulp) of the amphoteric polymer solution, dehydrated, and dried at 105° for 6 h to give pulp with ash yield 22.1%.

IT 308968~11-2P, Acrylamide-dimethylaminopropylacrylamide-itaconic acid copolymer 154261-80-0P,
 Acrylamide-dimethylacrylamide-dimethylaminoethyl methacrylate-itaconic acid copolymer 874888-84-3P,
 Acrylamide-acryloyloxyethylidemethylbenzylammonium chloride-itaconic acid-methacrylonitrile copolymer 874888-86-5P, Acrylamide-dimethylaminopropylacrylamide-itaconic acid-sodium methallylsulfonate copolymer 874888-88-7P, Acrylamide-2-hydroxy- N,N,N',N' -pentamethyl- N' -[3-[(1-oxo-2-propenyl)amino]propyl]-1,3-propanediammonium dichloride-itaconic acid-methacrylonitrile-sodium methallylsulfonate copolymer 874888-90-1P,
 Acrylamide-diallyldimethylammonium chloride-dimethylacrylamide-itaconic acid-sodium methallylsulfonate copolymer
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use);
 PRP (Properties); PREP (Preparation); USES (Uses)
 (amphoteric polymers as additives in pulp deinking for improved ash yield)

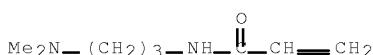
RN 108968-11-2 HCPLUS

CN Butanedioic acid, methylene-, polymer with
 N-[3-(dimethylamino)propyl]-2-propenamide and 2-propenamide (CA
 INDEX NAME)

CM 1

CRN 3845-76-9

CMF C8 H16 N2 O



CM 2

CRN 97-65-4

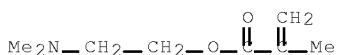
CMF C5 H6 O4



CM 3

CRN 79-06-1
CMF C3 H5 N ORN 154261-80-0 HCAPLUS
CN Butanedioic acid, methylene-, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, N,N-dimethyl-2-propenamide and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2
CMF C8 H15 N O2

CM 2

CRN 2680-03-7
CMF C5 H9 N O

CM 3

CRN 97-65-4
CMF C5 H6 O4

CM 4

CRN 79-06-1
CMF C3 H5 N O



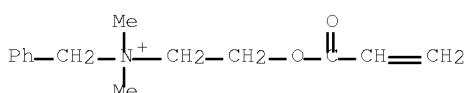
RN 874888-84-3 HCAPLUS

CN Benzenemethanaminium, N,N-dimethyl-N-[2-[(1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with methylenebutanedioic acid, 2-methyl-2-propenenitrile and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 46830-22-2

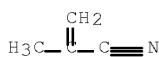
CMF C14 H20 N O2 . Cl



CM 2

CRN 126-98-7

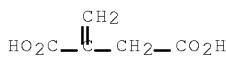
CMF C4 H5 N



CM 3

CRN 97-65-4

CMF C5 H6 O4



CM 4

CRN 79-06-1

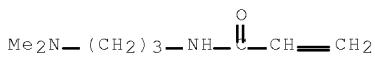
CMF C3 H5 N O



RN 874888-86-5 HCPLUS
 CN Butanedioic acid, methylene-, polymer with
 N-[3-(dimethylamino)propyl]-2-propenamide, 2-propenamide and
 sodium 2-methyl-2-propene-1-sulfonate (9CI) (CA INDEX NAME)

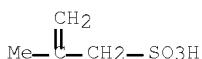
CM 1

CRN 3845-76-9
 CMF C8 H16 N2 O



CM 2

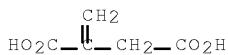
CRN 1561-92-8
 CMF C4 H8 O3 S . Na



● Na

CM 3

CRN 97-65-4
 CMF C5 H6 O4



CM 4

CRN 79-06-1
 CMF C3 H5 N O



RN 874888-88-7 HCPLUS
 CN 1,3-Propanediaminium, 2-hydroxy-N,N,N,N',N'-pentamethyl-N'-(3-[(1-oxo-2-propenyl)amino]propyl)-, dichloride, polymer with
 methylenebutanedioic acid, 2-methyl-2-propenenitrile,

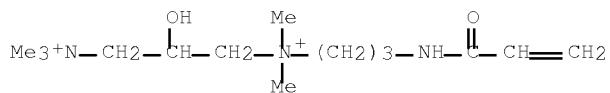
10/594,519-309792-EIC SEARCH

2-propenamide and sodium 2-methyl-2-propene-1-sulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 110226-36-3

CMF C14 H31 N3 O2 . 2 Cl

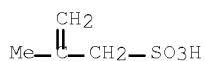


●2 Cl⁻

CM 2

CRN 1561-92-8

CMF C4 H8 O3 S . Na

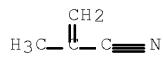


● Na

CM 3

CRN 126-98-7

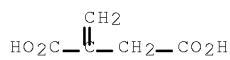
CMF C4 H5 N



CM 4

CRN 97-65-4

CMF C5 H6 O4



CM 5

CRN 79-06-1

CMF C3 H5 N O



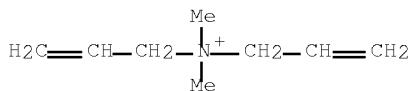
RN 874888-90-1 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with N,N-dimethyl-2-propenamide, methylenebutanedioic acid, 2-propenamide and sodium 2-methyl-2-propene-1-sulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl



CM 2

CRN 2680-03-7

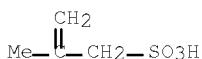
CMF C5 H9 N O



CM 3

CRN 1561-92-8

CMF C4 H8 O3 S . Na



CM 4

CRN 97-65-4

CMF C5 H6 O4



CM 5

CRN 79-06-1
CMF C3 H5 N O

CC 43-6 (Cellulose, Lignin, Paper, and Other Wood Products)
 IT 59765-66-1P, Acrylamide-acrylic acid-dimethylaminoethyl
 methacrylate-methylenebisacrylamide copolymer
 108968-11-2P, Acrylamide-dimethylaminopropylacrylamide-
 itaconic acid copolymer 154261-80-0P,
 Acrylamide-dimethylacrylamide-dimethylaminoethyl
 methacrylate-itaconic acid copolymer 874888-82-1P,
 Acrylamide-dimethylacrylamide-dimethylaminoethyl
 methacrylate-fumaric acid-
 methacryloyloxyethylmethyldimethylbenzylammonium chloride-sodium
 methallylsulfonate copolymer 874888-84-3P,
 Acrylamide-acryloyloxyethylmethyldimethylbenzylammonium
 chloride-itaconic acid-methacrylonitrile copolymer
 874888-86-5P, Acrylamide-dimethylaminopropylacrylamide-
 itaconic acid-sodium methallylsulfonate copolymer
 874888-88-7P, Acrylamide-2-hydroxy-N,N,N',N'-pentamethyl-
 N'-(3-[(1-oxo-2-propenyl)amino]propyl)-1,3-propanediammonium
 dichloride-itaconic acid-methacrylonitrile-sodium
 methallylsulfonate copolymer 874888-90-1P,
 Acrylamide-diallyldimethylammonium
 chloride-dimethylacrylamide-itaconic acid-sodium
 methallylsulfonate copolymer
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use);
 PRP (Properties); PREP (Preparation); USES (Uses)
 (amphoteric polymers as additives in pulp deinking for improved
 ash yield)

L83 ANSWER 6 OF 28 HCPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2004:781869 HCPLUS Full-text
 DOCUMENT NUMBER: 141:268606
 TITLE: Ink jet recording method by using pigment ink
 and additional processing solution
 INVENTOR(S): Nakatsu, Hiromi; Kamoto, Takanori; Suzuki,
 Kiyota; Tsubaki, Yorihisa; Aoki, Momomi
 PATENT ASSIGNEE(S): Sharp Corp., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----

10/594,519-309792-EIC SEARCH

JP 2004262081

A

20040924

JP 2003-54503

2003
0228

PRIORITY APPLN. INFO.:

<--
JP 2003-545032003
0228

<--

ED Entered STN: 24 Sep 2004

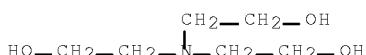
AB Images are formed by (1) jetting ink comprising at least a self-dispersing pigment surface-treated with carboxylic acid or sulfonic acid group, water, an alkali soluble resin \geq 5 weight%, and an alkaline agent on a recording material and (2) coating the material with a solution containing a water soluble resin with an acidic group and water or applying the solution on it, before, simultaneously, or after recording, resp. The method prevents bleeding, color mixture, and ink penetration to a backside, showing high image d. and improved resistance to abrasion, water, and light.

IT 102-71-8, Triethanolamine, uses

RL: TEM (Technical or engineered material use); USES (Uses)
(ink jet recording method by using pigment ink and addnl. processing solution)

RN 102-71-6 HCPLUS

CN Ethanol, 2,2',2''-nitrilotris- (CA INDEX NAME)



IT 25948-33-8, Acrylic acid-itaconic acid copolymer

RL: TEM (Technical or engineered material use); USES (Uses)
(processing solution containing; ink jet recording method by using pigment ink and addnl. processing solution)

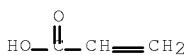
RN 25948-33-8 HCPLUS

CN Butanedioic acid, 2-methylene-, polymer with 2-propenoic acid (CA INDEX NAME)

CM 1

CRN 97-65-4
CMF C5 H6 O4

CM 2

CRN 79-10-7
CMF C3 H4 O2

IC ICM B41M005-00

ICS B41J002-01; C09D011-00

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and

Other Reprographic Processes)

IT 56-81-5, Glycerin, uses 100-42-5D, Styrene, acrylic polymers
 102-71-6, Triethanolamine, uses 111-46-6, Diethylene
 glycol, uses 112-34-5, Diethylene glycol monobutyl ether
 143-22-6, Triethylene glycol monobutyl ether 1559-34-8,
 Tetraethylene glycol monobutyl ether 5343-92-0, 1,2-Pentanediol
 6920-22-5, 1,2-Hexanediol 7732-18-5, Water, uses 222961-29-7,
 Cab O jet 200
 RL: TEM (Technical or engineered material use); USES (Uses)
 (ink jet recording method by using pigment ink and addnl.
 processing solution)

IT 67-63-0, Isopropyl alcohol, uses 25948-33-8, Acrylic
 acid-itaconic acid copolymer
 RL: TEM (Technical or engineered material use); USES (Uses)
 (processing solution containing; ink jet recording method by using
 pigment ink and addnl. processing solution)

L83 ANSWER 7 OF 28 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2004:700706 HCAPLUS Full-text
 DOCUMENT NUMBER: 141:208656
 TITLE: Water-soluble polymer
 coatings showing good gas barrier property in
 high humidity condition and plastics coated
 with them
 INVENTOR(S): Kamoshita, Miyuki
 PATENT ASSIGNEE(S): Toyo Ink Mfg. Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 28 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 2004238605	A	20040826	JP 2003-105899	2003 0409 --
PRIORITY APPLN. INFO.:			JP 2002-356849	A 2002 1209 --

ED Entered STN: 27 Aug 2004
 AB The coatings contain (A) (A1) CO₂H- and epoxy-free polymers manufactured from ethylenically unsatd. monomers bearing OH and/or (A2) CO₂H-free copolymers manufactured from ethylenically unsatd. monomers bearing OH and ethylenically unsatd. monomers bearing epoxy groups, and (B) OH-free polymers manufactured from ethylenically unsatd. monomers bearing CO₂H or acid anhydride groups at CO₂H/OH molar ratio 0.05-100. The coated plastics are useful for packaging materials. Thus, a stretched PET film was coated with a primer containing Vylon 200 (polyester) and Sumidur 3300 (polyisocyanate), dried, coated with an aqueous solution containing Blemmer GLM (glycerin methacrylate) and poly(acrylic acid) Na salt at CO₂H/OH molar ratio 4.42, dried, and heated, showing O permeability 1.12 cm³/m²-24 h-atm at 25° and relative humidity 80%.

IT 26099-89-8P 741708-91-8P
 RL: IMF (Industrial manufacture); POF (Polymer in formulation);
 RCT (Reactant); TEM (Technical or engineered material use); PREP
 (Preparation); RACT (Reactant or reagent); USES (Uses)
 (water-soluble polymer coatings showing good
 gas barrier property in high humidity condition for plastic
 substrates)

RN 26099-89-8 HCAPLUS
 CN Butanedioic acid, 2-methylene-, homopolymer, sodium salt (CA
 INDEX NAME)

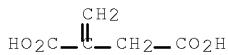
10/594,519-309792-EIC SEARCH

CM 1

CRN 25119-64-6
 CMF (C5 H6 O4)x
 CCI PMS

CM 2

CRN 97-65-4
 CMF C5 H6 O4



RN 741708-91-8 HCPLUS
 CN Butanedioic acid, methylene-, polymer with 2-propenoic acid,
 ammonium sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 25948-33-8
 CMF (C5 H6 O4 . C3 H4 O2)x
 CCI PMS

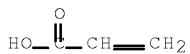
CM 2

CRN 97-65-4
 CMF C5 H6 O4



CM 3

CRN 79-10-7
 CMF C3 H4 O2



IT 741280-58-0P 741280-59-1P
 741708-90-7P 741708-93-0P
 741708-94-1P 741709-02-4P
 741709-06-8P 741709-08-0P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered
 material use); PREP (Preparation); USES (Uses)
 (water-soluble polymer coatings showing good
 gas barrier property in high humidity condition for plastic
 substrates)

RN 741280-58-0 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, monoester with 1,2,3-propanetriol,
 polymer with 4-hydroxybutyl 2-propenoate and 2-propenoic acid,
 sodium salt (9CI) (CA INDEX NAME)

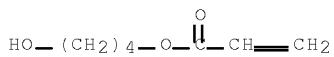
10/594,519-309792-EIC SEARCH

CM 1

CRN 741280-57-9
 CMF (C7 H12 O4 . C7 H12 O3 . C3 H4 O2)x
 CCI PMS

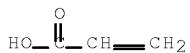
CM 2

CRN 2478-10-6
 CMF C7 H12 O3



CM 3

CRN 79-10-7
 CMF C3 H4 O2

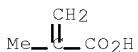


CM 4

CRN 50853-28-6
 CMF C7 H12 O4
 CCI IDS

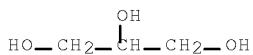
CM 5

CRN 79-41-4
 CMF C4 H6 O2



CM 6

CRN 56-81-5
 CMF C3 H8 O3



RN 741280-59-1 HCAPLUS

10/594,519-309792-EIC SEARCH

CN 2-Propenoic acid, 2-methyl-, monoester with 1,2,3-propanetriol, polymer with oxiranylmethyl 2-methyl-2-propenoate and 2-propenoic acid, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 160896-37-7

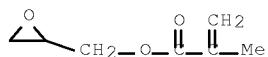
CMF (C₇ H₁₂ O₄ . C₇ H₁₀ O₃ . C₃ H₄ O₂)_x

CCI PMS

CM 2

CRN 106-91-2

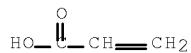
CMF C₇ H₁₀ O₃



CM 3

CRN 79-10-7

CMF C₃ H₄ O₂



CM 4

CRN 50853-28-6

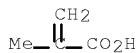
CMF C₇ H₁₂ O₄

CCI IDS

CM 5

CRN 79-41-4

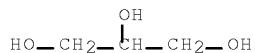
CMF C₄ H₆ O₂



CM 6

CRN 56-81-5

CMF C₃ H₈ O₃



RN 741708-90-7 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, monoester with 1,2,3-propanetriol,
 polymer with ethene and 2,5-furandione, sodium salt (9CI) (CA
 INDEX NAME)

CM 1

CRN 741708-89-4
 CMF (C7 H12 O4 . C4 H2 O3 . C2 H4)x
 CCI PMS

CM 2

CRN 108-31-6
 CMF C4 H2 O3



CM 3

CRN 74-85-1
 CMF C2 H4

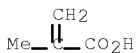


CM 4

CRN 50853-28-6
 CMF C7 H12 O4
 CCI IDS

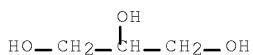
CM 5

CRN 79-41-4
 CMF C4 H6 O2



CM 6

CRN 56-81-5
 CMF C3 H8 O3



RN 741708-93-0 HCPLUS

CN Butanedioic acid, methylene-, polymer with 1,2,3-propanetriol mono(2-methyl-2-propenoate) and 2-propenoic acid, ammonium sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 741708-92-9

CMF (C7 H12 O4 . C5 H6 O4 . C3 H4 O2)x

CCI PMS

CM 2

CRN 97-65-4

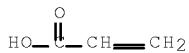
CMF C5 H6 O4



CM 3

CRN 79-10-7

CMF C3 H4 O2



CM 4

CRN 50853-28-6

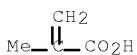
CMF C7 H12 O4

CCI IDS

CM 5

CRN 79-41-4

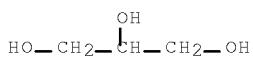
CMF C4 H6 O2



CM 6

CRN 56-81-5

CMF C3 H8 O3



RN 741708-94-1 HCAPLUS

CN Butanedioic acid, methylene-, polymer with 1,2,3-propanetriol mono(2-methyl-2-propenoate) and 2-propenoic acid, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 741708-92-9

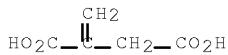
CMF (C7 H12 O4 . C5 H6 O4 . C3 H4 O2)x

CCI PMS

CM 2

CRN 97-65-4

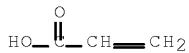
CMF C5 H6 O4



CM 3

CRN 79-10-7

CMF C3 H4 O2



CM 4

CRN 50853-28-6

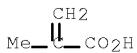
CMF C7 H12 O4

CCI IDS

CM 5

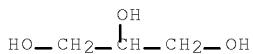
CRN 79-41-4

CMF C4 H6 O2



10/594,519-309792-EIC SEARCH

CM 6

CRN 56-81-5
CMF C3 H8 O3

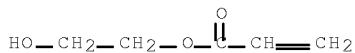
RN 741709-02-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, monoester with 1,2,3-propanetriol, polymer with ethene, 2,5-furandione and 2-hydroxyethyl 2-propenoate, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 741709-01-3
CMF (C7 H12 O4 . C5 H8 O3 . C4 H2 O3 . C2 H4)x
CCI PMS

CM 2

CRN 818-61-1
CMF C5 H8 O3

CM 3

CRN 108-31-6
CMF C4 H2 O3

CM 4

CRN 74-85-1
CMF C2 H4

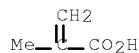
CM 5

CRN 50853-28-6
CMF C7 H12 O4

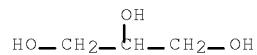
10/594,519-309792-EIC SEARCH

CCI IDS

CM 6

CRN 79-41-4
CMF C4 H6 O2

CM 7

CRN 56-81-5
CMF C3 H8 O3

RN 741709-06-8 HCPLUS

CN 2-Propenoic acid, 2-methyl-, monoester with 1,2,3-propanetriol, polymer with ethene, 2,5-furandione and 4-hydroxybutyl 2-propenoate, sodium salt (9CI) (CA INDEX NAME)

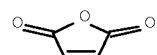
CM 1

CRN 741709-05-7
CMF (C₇ H₁₂ O₄ . C₇ H₁₂ O₃ . C₄ H₂ O₃ . C₂ H₄)_x
CCI PMS

CM 2

CRN 2478-10-6
CMF C₇ H₁₂ O₃

CM 3

CRN 108-31-6
CMF C₄ H₂ O₃

CM 4

CRN 74-85-1
 CMF C2 H4

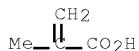


CM 5

CRN 50853-28-6
 CMF C7 H12 O4
 CCI IDS

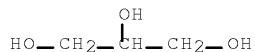
CM 6

CRN 79-41-4
 CMF C4 H6 O2



CM 7

CRN 56-81-5
 CMF C3 H8 O3



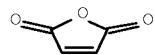
RN 741709-08-0 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, monoester with 1,2,3-propanetriol, polymer with ethene, 2,5-furandione and oxiranylmethyl 2-methyl-2-propenoate, sodium salt (9CI) (CA INDEX NAME)

CM 1

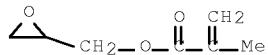
CRN 741709-07-9
 CMF (C7 H12 O4 . C7 H10 O3 . C4 H2 O3 . C2 H4)x
 CCI PMS

CM 2

CRN 108-31-6
 CMF C4 H2 O3



CM 3

CRN 106-91-2
CMF C7 H10 O3

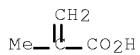
CM 4

CRN 74-85-1
CMF C2 H4

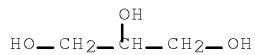
CM 5

CRN 50853-28-6
CMF C7 H12 O4
CCI IDS

CM 6

CRN 79-41-4
CMF C4 H6 O2

CM 7

CRN 56-81-5
CMF C3 H8 O3

IC ICM C09D133-14
ICS B05D007-02; B05D007-24; B32B027-30; C09D133-02; C09D157-10
CC 42-7 (Coatings, Inks, and Related Products)
Section cross-reference(s): 38
ST water soluble polymer coating gas barrier; gas barrier coating packaging PET film; glycerin methacrylate acrylic acid copolymer gas barrier coating
IT Packaging materials

(films, gas-impermeable; water-soluble polymer
coatings showing good gas barrier property in high humidity
condition for plastic substrates)

IT Coating materials
(gas-impermeable; water-soluble polymer
coatings showing good gas barrier property in high humidity
condition for plastic substrates)

IT Polyurethanes, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered
material use); PREP (Preparation); USES (Uses)
(polyester-, primers; water-soluble polymer
coatings showing good gas barrier property in high humidity
condition for plastic substrates)

IT Polyesters, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(water-soluble polymer coatings showing good
gas barrier property in high humidity condition for plastic
substrates)

IT 516514-65-1P
RL: IMF (Industrial manufacture); TEM (Technical or engineered
material use); PREP (Preparation); USES (Uses)
(primer; water-soluble polymer coatings
showing good gas barrier property in high humidity condition
for plastic substrates)

IT 25038-59-9, Poly(ethylene terephthalate), uses
RL: TEM (Technical or engineered material use); USES (Uses)
(substrate films; water-soluble polymer
coatings showing good gas barrier property in high humidity
condition for plastic substrates)

IT 9003-04-7P, Acrylic acid homopolymer sodium salt 9019-67-4P
26022-14-0P 26099-89-8P 28258-28-8P 29086-87-1P,
4-Hydroxybutyl acrylate homopolymer 130315-91-2P 138305-48-3P
741708-91-8P 741709-04-6P
RL: IMF (Industrial manufacture); POF (Polymer in formulation);
RCT (Reactant); TEM (Technical or engineered material use); PREP
(Preparation); RACT (Reactant or reagent); USES (Uses)
(water-soluble polymer coatings showing good
gas barrier property in high humidity condition for plastic
substrates)

IT 741280-53-5P 741280-58-0P 741280-59-1P
741708-90-7P 741708-93-0P
741708-94-1P 741708-98-5P 741709-00-2P
741709-02-4P 741709-06-8P
741709-08-0P
RL: IMF (Industrial manufacture); TEM (Technical or engineered
material use); PREP (Preparation); USES (Uses)
(water-soluble polymer coatings showing good
gas barrier property in high humidity condition for plastic
substrates)

L83 ANSWER 8 OF 28 HCPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:390974 HCPLUS Full-text
DOCUMENT NUMBER: 140:408516
TITLE: Use of a copolymer having at least one an
alkoxy- or hydroxypolyoxyalkylene grafted
function for improving optical brightener
activity, and products obtained therefrom
INVENTOR(S): Dupont, Francois; Jacquemet, Christian; Suau,
Jean Marc; Mongoin, Jacques
PATENT ASSIGNEE(S): Coatex, Fr.
SOURCE: Fr. Demande, 111 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

10/594,519-309792-EIC SEARCH

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2846978	A1	20040514	FR 2002-14000	2002 1108
FR 2846978	B1	20070518		<--
CA 2505099	A1	20040527	CA 2003-2505099	2003 1105
WO 2004044022	A1	20040527	WO 2003-FR3300	2003 1105
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				<--
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				<--
AU 2003292345	A1	20040603	AU 2003-292345	2003 1105
BR 2003015301	A	20050816	BR 2003-15301	2003 1105
EP 1565504	A1	20050824	EP 2003-767912	2003 1105
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				<--
CN 1717425	A	20060104	CN 2003-80104504	2003 1105
CN 100480292	C	20090422		<--
JP 2006505707	T	20060216	JP 2004-550741	2003 1105
ZA 2005003918	A	20070328	ZA 2005-3918	2003 1105
MX 2005004816	A	20050722	MX 2005-4816	2005 0504
IN 2005MN00389	A	20050930	IN 2005-MN389	2005 0506
NO 2005002759	A	20050805	NO 2005-2759	2005 0607

10/594,519-309792-EIC SEARCH

US 20060106186	A1	20060518	US 2005-533794	
				2005
				1004
<--				
PRIORITY APPLN. INFO.:		FR 2002-14000	A	
				2002
				1108
<--				
		WO 2003-FR3300	W	
				2003
				1105
<--				

ED Entered STN: 14 May 2004

AB Water-soluble polymers based on ethylenically unsatd. monomers and unsatd. derivs. of alkoxy- or hydroxypolyoxyalkylenes such as 13.5:3.5:83 (%) acrylic acid-methacrylic acid-polyethylene glycol mono-Me ether methacrylate graft copolymer Na salt are useful for activating optical brighteners in paper coatings, textiles, detergents, and paints.

IT 221882-30-0, Ethylene oxide-methacrylic acid graft copolymer methyl ether sodium salt 256511-28-1,
 Acrylic acid-ethylene oxide-methacrylic acid graft copolymer methyl ether sodium salt 382162-06-3
 382162-09-6 382162-32-5 382162-40-5
 382162-56-3, Acrylic acid-ethylene oxide-methacrylic acid graft copolymer methyl ether triethanolamine salt
 382162-62-1 382162-65-4 690210-47-0
 690210-48-1 690210-50-5 690210-54-9
 690210-57-2 690210-61-8 690210-70-9
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (comprised actual and assumed monomers; use of alkoxy- or hydroxypolyoxyalkylene-grafted acrylic polymers for improving optical brightener activity in paper coatings, textiles, detergents, and paints)

RN 221882-30-0 HCPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with oxirane, methyl ether, graft, sodium salt (CA INDEX NAME)

CM 1

CRN 67-56-1

CMF C H4 O

H₃C—OH

CM 2

CRN 167763-01-1

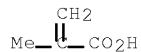
CMF (C4 H6 O2 . C2 H4 O)x

CCI PMS

CM 3

CRN 79-41-4

CMF C4 H6 O2



CM 4

CRN 75-21-8
CMF C2 H4 ORN 256511-28-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with oxirane and 2-propenoic acid, methyl ether, graft, sodium salt (CA INDEX NAME)

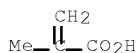
CM 1

CRN 67-56-1
CMF C H4 O

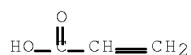
CM 2

CRN 159106-91-9
CMF (C4 H6 O2 . C3 H4 O2 . C2 H4 O)x
CCI PMS

CM 3

CRN 79-41-4
CMF C4 H6 O2

CM 4

CRN 79-10-7
CMF C3 H4 O2

CM 5

CRN 75-21-8
CMF C2 H4 O



RN 382162-06-3 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with
 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid,
 oxirane and 2-propenoic acid, methyl ether, graft, sodium salt
 (9CI) (CA INDEX NAME)

CM 1

CRN 67-56-1
 CMF C H4 O

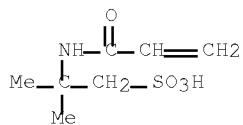


CM 2

CRN 256511-25-8
 CMF (C7 H13 N O4 S . C4 H6 O2 . C3 H4 O2 . C2 H4 O)x
 CCI PMS

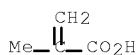
CM 3

CRN 15214-89-8
 CMF C7 H13 N O4 S



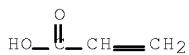
CM 4

CRN 79-41-4
 CMF C4 H6 O2



CM 5

CRN 79-10-7
 CMF C3 H4 O2



CM 6

CRN 75-21-8
CMF C2 H4 O

RN 382162-09-6 HCAPLUS
 CN Butanedioic acid, methylene-, polymer with 2-methyl-2-propenoic acid, oxirane and 2-propenoic acid, methyl ether, graft, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 67-56-1
CMF C H4 O

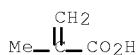
CM 2

CRN 382162-08-5
CMF (C5 H6 O4 . C4 H6 O2 . C3 H4 O2 . C2 H4 O)x
CCI PMS

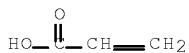
CM 3

CRN 97-65-4
CMF C5 H6 O4

CM 4

CRN 79-41-4
CMF C4 H6 O2

CM 5

CRN 79-10-7
CMF C3 H4 O2

CM 6

CRN 75-21-8
CMF C2 H4 ORN 382162-32-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with oxirane and 2-propenoic acid, methyl ether, graft, potassium salt (CA INDEX NAME)

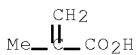
CM 1

CRN 67-56-1
CMF C H4 O

CM 2

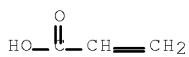
CRN 159106-91-9
CMF (C4 H6 O2 . C3 H4 O2 . C2 H4 O)x
CCI PMS

CM 3

CRN 79-41-4
CMF C4 H6 O2

CM 4

CRN 79-10-7
CMF C3 H4 O2



CM 5

CRN 75-21-8
CMF C2 H4 ORN 382162-40-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with oxirane and 2-propenoic acid, methyl ether, graft, ammonium salt (9CI) (CA INDEX NAME)

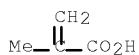
CM 1

CRN 67-56-1
CMF C H4 O

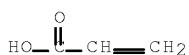
CM 2

CRN 159106-91-9
CMF (C4 H6 O2 . C3 H4 O2 . C2 H4 O)x
CCI PMS

CM 3

CRN 79-41-4
CMF C4 H6 O2

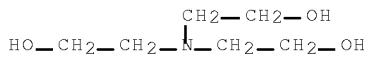
CM 4

CRN 79-10-7
CMF C3 H4 O2

CM 5

CRN 75-21-8
CMF C2 H4 ORN 382162-56-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with oxirane and 2-propenoic acid, methyl ether, graft, compd. with 2,2',2'''-nitrilotris[ethanol] (9CI) (CA INDEX NAME)

CM 1

CRN 102-71-6
CMF C6 H15 N O3

CM 2

CRN 381164-42-7
CMF (C4 H6 O2 . C3 H4 O2 . C2 H4 O)x . x C H4 O

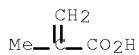
CM 3

CRN 67-56-1
CMF C H4 O

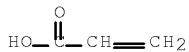
CM 4

CRN 159106-91-9
CMF (C4 H6 O2 . C3 H4 O2 . C2 H4 O)x
CCI PMS

CM 5

CRN 79-41-4
CMF C4 H6 O2

CM 6

CRN 79-10-7
CMF C3 H4 O2

CM 7

CRN 75-21-8
CMF C2 H4 O

RN 382162-62-1 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with oxirane and 2-propenoic acid, methyl ether, graft, calcium sodium salt (9CI) (CA INDEX NAME)

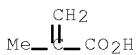
CM 1

CRN 67-56-1
CMF C H4 O

CM 2

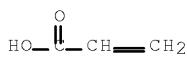
CRN 159106-91-9
CMF (C4 H6 O2 . C3 H4 O2 . C2 H4 O)x
CCI PMS

CM 3

CRN 79-41-4
CMF C4 H6 O2

CM 4

CRN 79-10-7
CMF C3 H4 O2



CM 5

CRN 75-21-8
CMF C2 H4 O

RN 382162-65-4 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with oxirane and 2-propenoic acid, methyl ether, graft, magnesium sodium salt (9CI) (CA INDEX NAME)

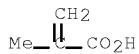
CM 1

CRN 67-56-1
CMF C H4 O

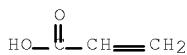
CM 2

CRN 159106-91-9
CMF (C4 H6 O2 . C3 H4 O2 . C2 H4 O)x
CCI PMS

CM 3

CRN 79-41-4
CMF C4 H6 O2

CM 4

CRN 79-10-7
CMF C3 H4 O2

CM 5

CRN 75-21-8
CMF C2 H4 ORN 690210-47-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with ethenyltrioxysilane, oxirane and 2-propenoic acid, methyl ether, graft, sodium salt (9CI) (CA INDEX NAME)

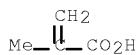
CM 1

CRN 67-56-1
CMF C H4 O

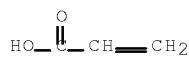
CM 2

CRN 690210-46-9
CMF (C8 H18 O3 Si . C4 H6 O2 . C3 H4 O2 . C2 H4 O)x
CCI PMS

CM 3

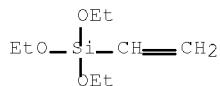
CRN 79-41-4
CMF C4 H6 O2

CM 4

CRN 79-10-7
CMF C3 H4 O2

CM 5

CRN 78-08-0
 CMF C8 H18 O3 Si



CM 6

CRN 75-21-8
 CMF C2 H4 O



RN 690210-48-1 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with oxirane, 2-propenoic acid and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate, methyl ether, graft, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 67-56-1
 CMF C H4 O

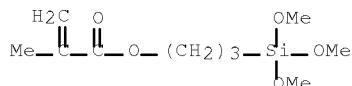


CM 2

CRN 689267-94-5
 CMF (C10 H20 O5 Si . C4 H6 O2 . C3 H4 O2 . C2 H4 O)x
 CCI PMS

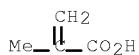
CM 3

CRN 2530-85-0
 CMF C10 H20 O5 Si

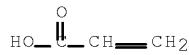


CM 4

CRN 79-41-4
 CMF C4 H6 O2



CM 5

CRN 79-10-7
CMF C3 H4 O2

CM 6

CRN 75-21-8
CMF C2 H4 O

RN 690210-50-5 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with
 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-
 heneicosfluorododecyl 2-propenoate, oxirane and 2-propenoic acid,
 methyl ether, graft, sodium salt (9CI) (CA INDEX NAME)

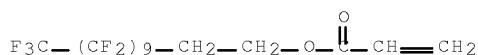
CM 1

CRN 67-56-1
CMF C H4 O

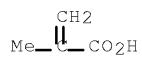
CM 2

CRN 690210-49-2
CMF (C15 H7 F21 O2 . C4 H6 O2 . C3 H4 O2 . C2 H4 O)x
CCI PMS

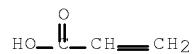
CM 3

CRN 17741-60-5
CMF C15 H7 F21 O2

CM 4

CRN 79-41-4
CMF C4 H6 O2

CM 5

CRN 79-10-7
CMF C3 H4 O2

CM 6

CRN 75-21-8
CMF C2 H4 O

RN 690210-54-9 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with 1,2-ethanediyl
 bis(2-methyl-2-propenoate), methyloxirane, oxirane and 2-propenoic
 acid, butyl methyl ether, graft, sodium salt (9CI) (CA INDEX
 NAME)

CM 1

CRN 71-36-3
CMF C4 H10 O

CM 2

CRN 67-56-1
CMF C H4 O

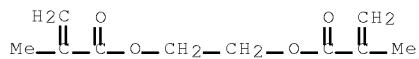


CM 3

CRN 690210-53-8
 CMF (C10 H14 O4 . C4 H6 O2 . C3 H6 O . C3 H4 O2 . C2 H4 O)x
 CCI PMS

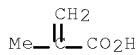
CM 4

CRN 97-90-5
 CMF C10 H14 O4



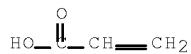
CM 5

CRN 79-41-4
 CMF C4 H6 O2



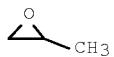
CM 6

CRN 79-10-7
 CMF C3 H4 O2



CM 7

CRN 75-56-9
 CMF C3 H6 O



CM 8

CRN 75-21-8
 CMF C2 H4 O



RN 690210-57-2 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with oxirane, 2-propenamide and 2-propenoic acid, methyl ether, graft, sodium salt (CA INDEX NAME)

CM 1

CRN 67-56-1
 CMF C H4 O

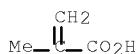


CM 2

CRN 245651-29-0
 CMF (C4 H6 O2 . C3 H5 N O . C3 H4 O2 . C2 H4 O) x
 CCI PMS

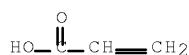
CM 3

CRN 79-41-4
 CMF C4 H6 O2



CM 4

CRN 79-10-7
 CMF C3 H4 O2



CM 5

CRN 79-06-1
 CMF C3 H5 N O



CM 6

CRN 75-21-8
CMF C2 H4 O

RN 690210-61-8 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with 2-hydroxyethyl
 2-methyl-2-propenoate phosphate, oxirane and 2-propenoic acid,
 methyl ether, graft, sodium salt (9CI) (CA INDEX NAME)

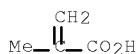
CM 1

CRN 67-56-1
CMF C H4 O

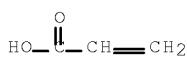
CM 2

CRN 690210-60-7
CMF (C6 H10 O3 . C4 H6 O2 . C3 H4 O2 . C2 H4 O . x H3 O4 P)x
CCI PMS

CM 3

CRN 79-41-4
CMF C4 H6 O2

CM 4

CRN 79-10-7
CMF C3 H4 O2

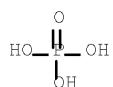
CM 5

CRN 75-21-8
CMF C2 H4 O

CM 6

CRN 52628-03-2
CMF C6 H10 O3 . x H3 O4 P

CM 7

CRN 7664-38-2
CMF H3 O4 P

CM 8

CRN 868-77-9
CMF C6 H10 O3

RN 690210-70-9 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with
 α -[dimethyl[3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl]silyl]-
 ω -[[dimethyl[3-[(2-methyl-1-oxo-2-
 propenyl)oxy]propyl]silyl]oxy]poly[oxy(dimethylsilylene)],
 methyloxirane, oxirane and 2-propenoic acid, methyl ether, graft,
 sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 67-56-1
CMF C H4 O

10/594,519-309792-EIC SEARCH

CM 2

CRN 690210-69-6

CMF (C4 H6 O2 . C3 H6 O . C3 H4 O2 . (C2 H6 O Si)n C18 H34 O5 Si2 . C2 H4 O)x

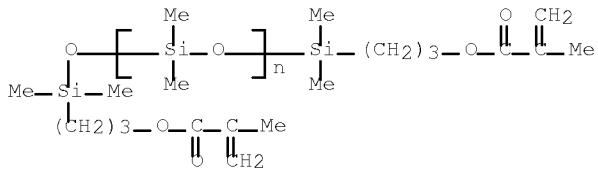
CCI PMS

CM 3

CRN 58130-03-3

CMF (C2 H6 O Si)n C18 H34 O5 Si2

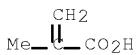
CCI PMS



CM 4

CRN 79-41-4

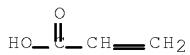
CMF C4 H6 O2



CM 5

CRN 79-10-7

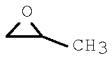
CMF C3 H4 O2



CM 6

CRN 75-56-9

CMF C3 H6 O



CM 7

CRN 75-21-8
 CMF C2 H4 O

△

IT 221881-27-2, Methacrylic acid-polyethylene glycol methyl ether methacrylate graft copolymer sodium salt
 381686-32-4, 2-Acrylamido-2-methylpropanesulfonic acid-acrylic acid-methacrylic acid-polyethylene glycol methyl ether methacrylate graft copolymer sodium salt
 381686-34-6, Acrylic acid-itaconic acid-methacrylic acid-polyethylene glycol methyl ether methacrylate graft copolymer sodium salt 381686-36-8, Acrylic acid-methacrylic acid-polyethylene glycol methyl ether methacrylate graft copolymer sodium salt 381686-45-9, Acrylic acid-methacrylic acid-polyethylene glycol methyl ether methacrylate graft copolymer potassium salt 381686-46-0, Acrylic acid-methacrylic acid-polyethylene glycol methyl ether methacrylate graft copolymer ammonium salt 381686-47-1, Acrylic acid-methacrylic acid-polyethylene glycol methyl ether methacrylate graft copolymer triethanolamine salt 381686-50-6, Acrylic acid-methacrylic acid-polyethylene glycol methyl ether methacrylate graft copolymer calcium sodium salt 381686-51-7, Acrylic acid-methacrylic acid-polyethylene glycol methyl ether methacrylate graft copolymer magnesium sodium salt 688810-67-8, Acrylic acid-methacrylic acid-polyethylene glycol methyl ether methacrylate-vinyltriethoxysilane graft copolymer sodium salt 688810-69-7, Acrylic acid-methacrylic acid-3-(methacryloyloxy)propyltrimethoxysilane-polyethylene glycol methyl ether methacrylate graft copolymer sodium salt 688810-71-1, Acrylic acid-methacrylic acid-polyethylene glycol methyl ether methacrylate-2-(perfluorodecyl)ethyl acrylate graft copolymer sodium salt 688810-73-3, Acrylamide-acrylic acid-methacrylic acid-polyethylene glycol methyl ether methacrylate graft copolymer sodium salt 690210-52-7 690210-56-1 690210-59-4
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (use of alkoxy- or hydroxypolyoxyalkylene-grafted acrylic polymers for improving optical brightener activity in paper coatings, textiles, detergents, and paints)

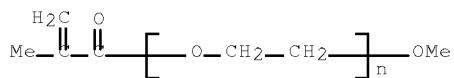
RN 221881-27-2 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with
 α-(2-methyl-1-oxo-2-propen-1-yl)-ω-methoxypoly(oxy-1,2-ethanediyl), graft, sodium salt (CA INDEX NAME)

CM 1

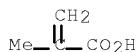
CRN 111740-39-7
 CMF (C4 H6 O2 . (C2 H4 O)n C5 H8 O2)x
 CCI PMS

CM 2

CRN 26915-72-0
 CMF (C2 H4 O)n C5 H8 O2
 CCI PMS



CM 3

CRN 79-41-4
CMF C4 H6 O2

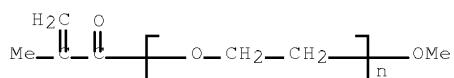
RN 381686-32-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with
2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid,
 α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-
ethanediyl) and 2-propenoic acid, graft, sodium salt (9CI) (CA
INDEX NAME)

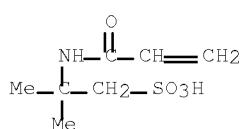
CM 1

CRN 381686-31-3
CMF (C7 H13 N O4 S . C4 H6 O2 . C3 H4 O2 . (C2 H4 O)n C5 H8 O2)x
CCI PMS

CM 2

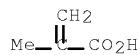
CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS

CM 3

CRN 15214-89-8
CMF C7 H13 N O4 S

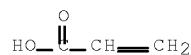
CM 4

CRN 79-41-4
 CMF C4 H6 O2



CM 5

CRN 79-10-7
 CMF C3 H4 O2



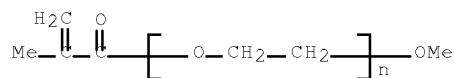
RN 381686-34-6 HCAPLUS
 CN Butanedioic acid, methylene-, polymer with
 α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-
 ethanediyl), 2-methyl-2-propenoic acid and 2-propenoic acid,
 graft, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 381686-33-5
 CMF (C5 H6 O4 . C4 H6 O2 . C3 H4 O2 . (C2 H4 O)n C5 H8 O2)x
 CCI PMS

CM 2

CRN 26915-72-0
 CMF (C2 H4 O)n C5 H8 O2
 CCI PMS



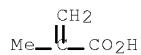
CM 3

CRN 97-65-4
 CMF C5 H6 O4



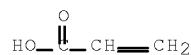
CM 4

CRN 79-41-4
 CMF C4 H6 O2



CM 5

CRN 79-10-7
 CMF C3 H4 O2



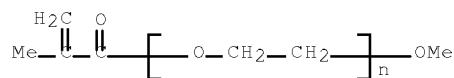
RN 381686-36-8 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with
 α -(2-methyl-1-oxo-2-propen-1-yl)- ω -methoxypoly(oxy-1,2-
 ethanediyl) and 2-propenoic acid, graft, sodium salt (CA INDEX
 NAME)

CM 1

CRN 381686-35-7
 CMF (C4 H6 O2 . C3 H4 O2 . (C2 H4 O)n C5 H8 O2)x
 CCI PMS

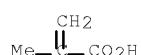
CM 2

CRN 26915-72-0
 CMF (C2 H4 O)n C5 H8 O2
 CCI PMS



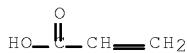
CM 3

CRN 79-41-4
 CMF C4 H6 O2



CM 4

CRN 79-10-7
 CMF C3 H4 O2



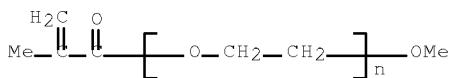
RN 381686-45-9 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with
 α -(2-methyl-1-oxo-2-propen-1-yl)- ω -methoxypoly(oxy-1,2-
 ethanediyl) and 2-propenoic acid, graft, potassium salt (CA INDEX
 NAME)

CM 1

CRN 381686-35-7
 CMF (C₄ H₆ O₂ . C₃ H₄ O₂ . (C₂ H₄ O)_n C₅ H₈ O₂)_x
 CCI PMS

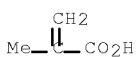
CM 2

CRN 26915-72-0
 CMF (C₂ H₄ O)_n C₅ H₈ O₂
 CCI PMS



CM 3

CRN 79-41-4
 CMF C₄ H₆ O₂



CM 4

CRN 79-10-7
 CMF C₃ H₄ O₂



RN 381686-46-0 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with

10/594,519-309792-EIC SEARCH

α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl) and 2-propenoic acid, graft, ammonium salt (9CI) (CA INDEX NAME)

CM 1

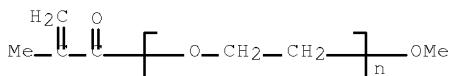
CRN 381686-35-7

CMF (C₄ H₆ O₂ . C₃ H₄ O₂ . (C₂ H₄ O)_n C₅ H₈ O₂)_x
CCI PMS

CM 2

CRN 26915-72-0

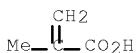
CMF (C₂ H₄ O)_n C₅ H₈ O₂
CCI PMS



CM 3

CRN 79-41-4

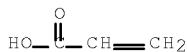
CMF C₄ H₆ O₂



CM 4

CRN 79-10-7

CMF C₃ H₄ O₂



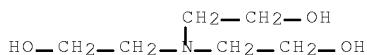
RN 381686-47-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with
 α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl) and 2-propenoic acid, graft, compd. with
2,2',2'''-nitrilotris[ethanol] (9CI) (CA INDEX NAME)

CM 1

CRN 102-71-6

CMF C₆ H₁₅ N O₃

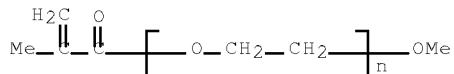


CM 2

CRN 381686-35-7
CMF (C4 H6 O2 . C3 H4 O2 . (C2 H4 O)n C5 H8 O2)x
CCI PMS

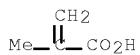
CM 3

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS



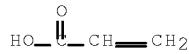
CM 4

CRN 79-41-4
CMF C4 H6 O2



CM 5

CRN 79-10-7
CMF C3 H4 O2



RN 381686-50-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with
 α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-
ethanediyl) and 2-propenoic acid, graft, calcium sodium salt (9CI)
(CA INDEX NAME)

CM 1

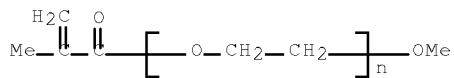
CRN 381686-35-7
CMF (C4 H6 O2 . C3 H4 O2 . (C2 H4 O)n C5 H8 O2)x
CCI PMS

CM 2

CRN 26915-72-0

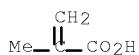
10/594,519-309792-EIC SEARCH

CMF (C₂ H₄ O)_n C₅ H₈ O₂
 CCI PMS



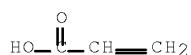
CM 3

CRN 79-41-4
 CMF C₄ H₆ O₂



CM 4

CRN 79-10-7
 CMF C₃ H₄ O₂



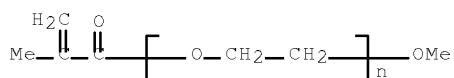
RN 381686-51-7 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with
 α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-
 ethanediyl) and 2-propenoic acid, graft, magnesium sodium salt
 (9CI) (CA INDEX NAME)

CM 1

CRN 381686-35-7
 CMF (C₄ H₆ O₂ . C₃ H₄ O₂ . (C₂ H₄ O)_n C₅ H₈ O₂)_x
 CCI PMS

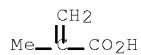
CM 2

CRN 26915-72-0
 CMF (C₂ H₄ O)_n C₅ H₈ O₂
 CCI PMS



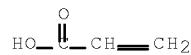
CM 3

CRN 79-41-4
 CMF C4 H6 O2



CM 4

CRN 79-10-7
 CMF C3 H4 O2



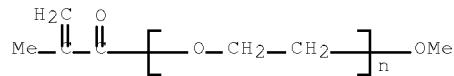
RN 688810-67-5 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with ethenyltriethoxysilane,
 α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-
 ethanediyl) and 2-propenoic acid, graft, sodium salt (9CI) (CA
 INDEX NAME)

CM 1

CRN 688810-66-4
 CMF (C8 H18 O3 Si . C4 H6 O2 . C3 H4 O2 . (C2 H4 O)n C5 H8 O2)x
 CCI PMS

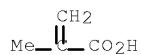
CM 2

CRN 26915-72-0
 CMF (C2 H4 O)n C5 H8 O2
 CCI PMS



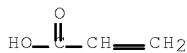
CM 3

CRN 79-41-4
 CMF C4 H6 O2



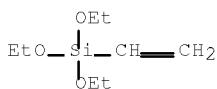
CM 4

CRN 79-10-7
CMF C3 H4 O2



CM 5

CRN 78-08-0
CMF C8 H18 O3 Si



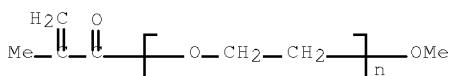
RN 688810-69-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with
α-(2-methyl-1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-
ethanediyl), 2-propenoic acid and 3-(trimethoxysilyl)propyl
2-methyl-2-propenoate, graft, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 688810-68-6
CMF (C10 H20 O5 Si . C4 H6 O2 . C3 H4 O2 . (C2 H4 O)n C5 H8 O2)x
CCI PMS

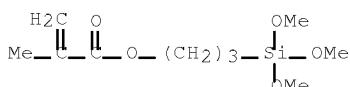
CM 2

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS

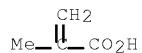


CM 3

CRN 2530-85-0
CMF C10 H20 O5 Si



CM 4

CRN 79-41-4
CMF C4 H6 O2

CM 5

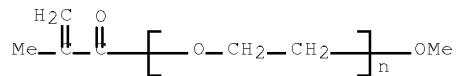
CRN 79-10-7
CMF C3 H4 O2

RN 688810-71-1 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with
 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-
 heneicosfluorododecyl 2-propenoate,
 α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-
 ethanediyl) and 2-propenoic acid, graft, sodium salt (9CI) (CA
 INDEX NAME)

CM 1

CRN 688810-70-0
CMF (C15 H7 F21 O2 . C4 H6 O2 . C3 H4 O2 . (C2 H4 O)n C5 H8 O2)x
CCI PMS

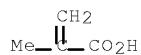
CM 2

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS

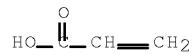
CM 3

CRN 17741-60-5
CMF C15 H7 F21 O2

CM 4

CRN 79-41-4
CMF C4 H6 O2

CM 5

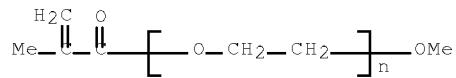
CRN 79-10-7
CMF C3 H4 O2

RN 688810-73-3 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with
 α -(2-methyl-1-oxo-2-propen-1-yl)- ω -methoxypoly(oxy-1,2-
 ethanediyl), 2-propenamide and 2-propenoic acid, graft, sodium
 salt (CA INDEX NAME)

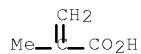
CM 1

CRN 688810-72-2
 CMF (C4 H6 O2 . C3 H5 N O . C3 H4 O2 . (C2 H4 O)n C5 H8 O2)x
 CCI PMS

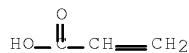
CM 2

CRN 26915-72-0
 CMF (C2 H4 O)n C5 H8 O2
 CCI PMS

CM 3

CRN 79-41-4
CMF C4 H6 O2

CM 4

CRN 79-10-7
CMF C3 H4 O2

CM 5

CRN 79-06-1
CMF C3 H5 N O

RN 690210-52-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1,2-ethanediyl bis(2-methyl-2-propenoate), methyloxirane, α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl), oxirane and 2-propenoic acid, butyl ether, block, graft, sodium salt (9CI) (CA INDEX NAME)

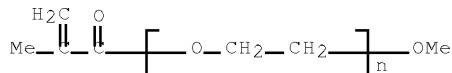
CM 1

CRN 71-36-3
CMF C4 H10 O

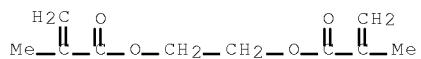
CM 2

CRN 690210-51-6
CMF (C10 H14 O4 . C4 H6 O2 . C3 H6 O . C3 H4 O2 . (C2 H4 O)n C5 H8 O2 . C2 H4 O)x
CCI PMS

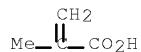
CM 3

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS

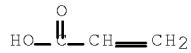
CM 4

CRN 97-90-5
CMF C10 H14 O4

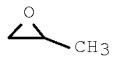
CM 5

CRN 79-41-4
CMF C4 H6 O2

CM 6

CRN 79-10-7
CMF C3 H4 O2

CM 7

CRN 75-56-9
CMF C3 H6 O

CM 8

CRN 75-21-8
CMF C2 H4 O

RN 690210-56-1 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with
 α -[dimethyl[3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl]silyl]-
 ω -[[dimethyl[3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl]silyl]oxy]poly[oxy(dimethylsilylene)],
 methyloxirane, α -(2-methyl-1-oxo-2-propenyl)- ω -
 methoxypoly(oxy-1,2-ethanediyl), oxirane and 2-propenoic acid,
 methyl ether, block, graft, sodium salt (9CI) (CA INDEX NAME)

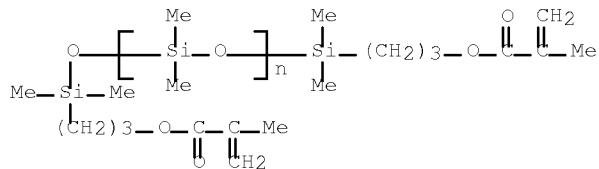
CM 1

CRN 67-56-1
 CMF C H4 O $\text{H}_3\text{C}-\text{OH}$

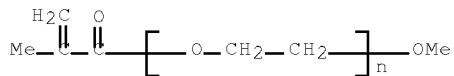
CM 2

CRN 690210-55-0
 CMF $(\text{C}_4 \text{ H}_6 \text{ O}_2 \cdot \text{C}_3 \text{ H}_6 \text{ O} \cdot \text{C}_3 \text{ H}_4 \text{ O}_2 \cdot (\text{C}_2 \text{ H}_6 \text{ O Si})_n \text{C}_18 \text{ H}_{34} \text{ O}_5 \text{ Si}_2$
 $\cdot (\text{C}_2 \text{ H}_4 \text{ O})_n \text{C}_5 \text{ H}_8 \text{ O}_2 \cdot \text{C}_2 \text{ H}_4 \text{ O})_x$
 CCI PMS

CM 3

CRN 58130-03-3
 CMF $(\text{C}_2 \text{ H}_6 \text{ O Si})_n \text{C}_18 \text{ H}_{34} \text{ O}_5 \text{ Si}_2$
 CCI PMS

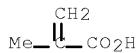
CM 4

CRN 26915-72-0
 CMF $(\text{C}_2 \text{ H}_4 \text{ O})_n \text{C}_5 \text{ H}_8 \text{ O}_2$
 CCI PMS

CM 5

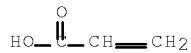
10/594,519-309792-EIC SEARCH

CRN 79-41-4
 CMF C4 H6 O2



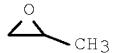
CM 6

CRN 79-10-7
 CMF C3 H4 O2



CM 7

CRN 75-56-9
 CMF C3 H6 O



CM 8

CRN 75-21-8
 CMF C2 H4 O



RN 690210-59-4 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with 2-hydroxyethyl
 2-methyl-2-propenoate phosphate,
 α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-
 ethanediyl) and 2-propenoic acid, graft, sodium salt (9CI) (CA
 INDEX NAME)

CM 1

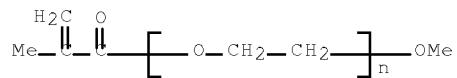
CRN 690210-58-3
 CMF (C6 H10 O3 . C4 H6 O2 . C3 H4 O2 . (C2 H4 O)n C5 H8 O2 . x H3
 O4 P)x
 CCI PMS

CM 2

CRN 26915-72-0

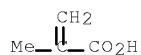
10/594,519-309792-EIC SEARCH

CMF (C₂ H₄ O)_n C₅ H₈ O₂
 CCI PMS



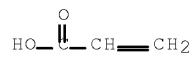
CM 3

CRN 79-41-4
 CMF C₄ H₆ O₂



CM 4

CRN 79-10-7
 CMF C₃ H₄ O₂

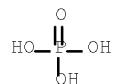


CM 5

CRN 52628-03-2
 CMF C₆ H₁₀ O₃ . x H₃ O₄ P

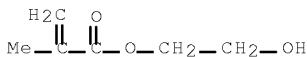
CM 6

CRN 7664-38-2
 CMF H₃ O₄ P



CM 7

CRN 868-77-9
 CMF C₆ H₁₀ O₃



IC ICM D21H021-32
 ICS D21H019-36; D06L003-00; C11D003-37; C11D003-42; C08F290-14

CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)
 Section cross-reference(s): 40, 42, 46

IT 221882-30~0, Ethylene oxide-methacrylic acid graft copolymer methyl ether sodium salt 256335-43-0, Acrylic acid-ethylene oxide graft copolymer methyl ether sodium salt 256511-28~1, Acrylic acid-ethylene oxide-methacrylic acid graft copolymer methyl ether sodium salt 291536-23-7, Acrylic acid-ethyl acrylate-ethylene oxide graft copolymer methyl ether sodium salt 382164-42-7 382162-06~3 382162-09~6 382162-32~5 382162-40~5 382162-56~3, Acrylic acid-ethylene oxide-methacrylic acid graft copolymer methyl ether triethanolamine salt 382162-62~1 382162-65~4 690210-47~0 690210-48~1 690210-50~5 690210-54~9 690210-57~2 690210-61~8 690210-63~0 690210-70~9 690224-11~4
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (comprised actual and assumed monomers; use of alkoxy- or hydroxypolyoxyalkylene-grafted acrylic polymers for improving optical brightener activity in paper coatings, textiles, detergents, and paints)

IT 221881-27~2, Methacrylic acid-polyethylene glycol methyl ether methacrylate graft copolymer sodium salt 381686-32~4, 2-Acrylamido-2-methylpropanesulfonic acid-acrylic acid-methacrylic acid-polyethylene glycol methyl ether methacrylate graft copolymer sodium salt 381686-34~6, Acrylic acid-itaconic acid-methacrylic acid-polyethylene glycol methyl ether methacrylate graft copolymer sodium salt 381686-35~7, Acrylic acid-methacrylic acid-polyethylene glycol methyl ether methacrylate graft copolymer 381686-36~8, Acrylic acid-methacrylic acid-polyethylene glycol methyl ether methacrylate graft copolymer sodium salt 381686-45~9, Acrylic acid-methacrylic acid-polyethylene glycol methyl ether methacrylate graft copolymer potassium salt 381686-46~0, Acrylic acid-methacrylic acid-polyethylene glycol methyl ether methacrylate graft copolymer ammonium salt 381686-47~1, Acrylic acid-methacrylic acid-polyethylene glycol methyl ether methacrylate graft copolymer triethanolamine salt 381686-50~6, Acrylic acid-methacrylic acid-polyethylene glycol methyl ether methacrylate graft copolymer calcium sodium salt 381686-51~7, Acrylic acid-methacrylic acid-polyethylene glycol methyl ether methacrylate graft copolymer magnesium sodium salt 688810-65~3 688810-67~5, Acrylic acid-methacrylic acid-polyethylene glycol methyl ether methacrylate-vinyltriethoxysilane graft copolymer sodium salt 688810-69~7, Acrylic acid-methacrylic acid-3-(methacryloyloxy)propyltrimethoxysilane-polyethylene glycol methyl ether methacrylate graft copolymer sodium salt 688810-71~1, Acrylic acid-methacrylic acid-polyethylene glycol methyl ether methacrylate-2-(perfluorodecyl)ethyl acrylate graft copolymer sodium salt 688810-73~3, Acrylamide-acrylic acid-methacrylic acid-polyethylene glycol methyl ether methacrylate graft copolymer sodium salt 688810-74~4 690210-52~7 690210-56~1 690210-59~4
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

10/594,519-309792-EIC SEARCH

(use of alkoxy- or hydroxypolyoxyalkylene-grafted acrylic polymers for improving optical brightener activity in paper coatings, textiles, detergents, and paints)

OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)
 REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L83 ANSWER 9 OF 28 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2004:181793 HCAPLUS Full-text
 DOCUMENT NUMBER: 140:218990
 TITLE: Wellbore cementing compositions from aqueous slurries containing acid degradable glass and water soluble polyalkenoic acid for composites with elasticity or high compressive strength and low permeability
 INVENTOR(S): Funkhouser, Gary P.; Eoff, Larry S.; Norman, Lewis R.
 PATENT ASSIGNEE(S): Halliburton Energy Services, Inc., USA
 SOURCE: Eur. Pat. Appl., 6 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1394135	A2	20040303	EP 2003-255254	2003 0822
<--				
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 20040040714	A1	20040304	US 2002-231971	2002 0830
<--				
CA 2436454	A1	20040229	CA 2003-2436454	2003 0804
<--				
US 20050038164	A1	20050217	US 2004-903772	2004 0730
<--				
US 7238229	B2	20070703	US 2002-231971	A 2002 0830

PRIORITY APPLN. INFO.: ED Entered STN: 05 Mar 2004

AB Wellbores are cemented using cement compns. having elasticity or high compressive strength and low permeability, basically comprised of particulate acid degradable glass, water, at least one water soluble polyalkenoic acid, or at least one water soluble polymerizable alkenoic acid monomer and a water soluble free-radical initiator. Some well cementing applications a cement composition is required that upon setting has a higher compressive strength and lower permeability than conventional hydraulic cement compns. The cement composition contains sufficient water to form a slurry and a water soluble polyalkenoic acid that reacts with the acid degradable glass to form a cement mass. Thus, a cement composition was prepared by combining a 30 % by weight water solution of a copolymer of acrylic acid and itaconic acid (weight ratio of 7:3, resp.)

10/594,519-309792-EIC SEARCH

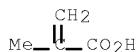
with particulate acid degradable glass. The composition was cured for 24 h at 73°F, after which the composition had a compressive strength of 2912 psi.

IT 25087-26-7, Methacrylic acid homopolymer
 25948-33-8, Acrylic acid-itaconic acid copolymer
 RL: CPS (Chemical process); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
 (aqueous slurries; wellbore cementing compns. from aqueous slurries containing acid degradable glass and water
 soluble polyalkenoic acid for elasticity or high compressive strength and low permeability)

RN 25087-26-7 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, homopolymer (CA INDEX NAME)

CM 1

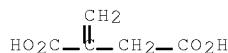
CRN 79-41-4
 CMF C4 H6 O2



RN 25948-33-8 HCPLUS
 CN Butanedioic acid, 2-methylene-, polymer with 2-propenoic acid (CA INDEX NAME)

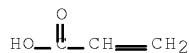
CM 1

CRN 97-65-4
 CMF C5 H6 O4



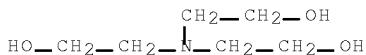
CM 2

CRN 79-10-7
 CMF C3 H4 O2

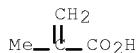


IT 102-71-6, Triethanolamine, uses
 RL: CPS (Chemical process); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
 (reducing agent; wellbore cementing compns. from aqueous slurries containing acid degradable glass and water
 soluble polyalkenoic acid for elasticity or high compressive strength and low permeability)

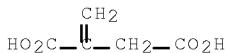
RN 102-71-6 HCPLUS
 CN Ethanol, 2,2',2'''-nitrilotris- (CA INDEX NAME)



IT 79-41-4, Methacrylic acid, uses 97-65-4,
 Itaconic acid, uses
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
 (water-soluble polymers; wellbore cementing compns. from aqueous slurries containing acid degradable glass and water soluble polyalkenoic acid for elasticity or high compressive strength and low permeability)
 RN 79-41-4 HCPLUS
 CN 2-Propenoic acid, 2-methyl- (CA INDEX NAME)



RN 97-65-4 HCPLUS
 CN Butanedioic acid, 2-methylene- (CA INDEX NAME)



IC ICM C04B028-08
 ICS C04B028-00; E21B033-13
 CC 38-3 (Plastics Fabrication and Uses)
 Section cross-reference(s): 51, 58
 ST cementing wellbore water sol polymer acid
 degradable glass curing; compressive strength permeability polymer
 glass cementing composite
 IT Glass, uses
 RL: CPS (Chemical process); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
 (acid degradable; wellbore cementing compns. from aqueous slurries containing acid degradable glass and water soluble polyalkenoic acid for elasticity or high compressive strength and low permeability)
 IT Slurries
 (aqueous, polymer-acid degradable glass; wellbore cementing compns. from aqueous slurries containing acid degradable glass and water soluble polyalkenoic acid for elasticity or high compressive strength and low permeability)
 IT Composites
 (polymer-glass particulate; wellbore cementing compns. from aqueous slurries containing acid degradable glass and water soluble polyalkenoic acid for elasticity or high compressive strength and low permeability)
 IT Polymerization catalysts
 (radical, water-soluble; wellbore cementing compns. from aqueous slurries containing acid degradable glass and water soluble polyalkenoic acid for elasticity or high compressive strength and low permeability)

IT Fatty acids, uses
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
 (unsatd., ~~water-soluble~~ polymers; wellbore cementing compns. from aqueous slurries containing acid degradable glass and ~~water~~ soluble polyalkenoic acid for elasticity or high compressive strength and low permeability)

IT Polymers, uses
 RL: CPS (Chemical process); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
 (~~water-soluble~~, aqueous slurries; wellbore cementing compns. from aqueous slurries containing acid degradable glass and ~~water~~ soluble polyalkenoic acid for elasticity or high compressive strength and low permeability)

IT Compressive strength
 Wells
 (wellbore cementing compns. from aqueous slurries containing acid degradable glass and ~~water~~ soluble polyalkenoic acid for elasticity or high compressive strength and low permeability)

IT Cement
 (wellbore, polymer-glass composite; wellbore cementing compns. from aqueous slurries containing acid degradable glass and ~~water~~ soluble polyalkenoic acid for elasticity or high compressive strength and low permeability)

IT 9003-01-4, Acrylic acid homopolymer 25087-26-7, Methacrylic acid homopolymer 25948-33-8, Acrylic acid-itaconic acid copolymer
 RL: CPS (Chemical process); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
 (aqueous slurries; wellbore cementing compns. from aqueous slurries containing acid degradable glass and ~~water~~ soluble polyalkenoic acid for elasticity or high compressive strength and low permeability)

IT 7631-86-9, Silica, uses
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (flour, filler; wellbore cementing compns. from aqueous slurries containing acid degradable glass and ~~water~~ soluble polyalkenoic acid for elasticity or high compressive strength and low permeability)

IT 1332-37-2, Iron oxide, uses
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (powdered, filler; wellbore cementing compns. from aqueous slurries containing acid degradable glass and ~~water~~ soluble polyalkenoic acid for elasticity or high compressive strength and low permeability)

IT 102-71-6, Triethanolamine, uses 7631-90-5, Sodium bisulfite 7772-98-7, Sodium thiosulfate
 RL: CPS (Chemical process); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
 (reducing agent; wellbore cementing compns. from aqueous slurries containing acid degradable glass and ~~water~~ soluble polyalkenoic acid for elasticity or high compressive strength and low permeability)

IT 75-91-2, tert-Butyl hydroperoxide 2638-94-0, 4,4'-Azobis(4-cyanovaleic acid) 2997-92-4, 2,2'-Azobis(2-methylpropionamidine) dihydrochloride 7722-84-1, Hydrogen peroxide, uses 7727-54-0, Ammonium persulfate 7775-27-1, Sodium persulfate 10288-28-5 27776-21-2,

10/594,519-309792-EIC SEARCH

2,2'-Azobis[2-(2-imidazolin-2-yl)propane] dihydrochloride
61551-69-7, 2,2'-Azobis[2-methyl-N-(2-hydroxyethyl)propionamide]
115947-73-4

RL: CPS (Chemical process); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(water-soluble free-radical initiator;
wellbore cementing compns. from aqueous slurries containing
acid degradable glass and water soluble
polyalkenoic acid for elasticity or high compressive strength
and low permeability)

IT 79-10-7, Acrylic acid, uses 79-41-4, Methacrylic acid,
uses 97-65-4, Itaconic acid, uses 110-16-7, Maleic
acid, uses 25249-16-5 25703-79-1 26022-14-0, Hydroxyethyl
acrylate polymer 32029-53-1, Hydroxypropyl acrylate polymer
89856-34-8, 2-Butene-1,2,3-tricarboxylic acid
RL: CPS (Chemical process); PEP (Physical, engineering or chemical
process); TEM (Technical or engineered material use); PROC
(Process); USES (Uses)

(water-soluble polymers; wellbore cementing
compns. from aqueous slurries containing acid degradable
glass and water soluble polyalkenoic acid for
elasticity or high compressive strength and low permeability)

L83 ANSWER 10 OF 28 HCPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:194826 HCPLUS Full-text

DOCUMENT NUMBER: 138:223173

TITLE: Acrylamide polymer-based strengthening agent
for papermaking

INVENTOR(S): Nakamura, Kenichi; Kiyota, Kenzo; Doi,
Hirotoshi

PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	

JP 2003073991	A	20030312	JP 2001-259250	2001 0829

PRIORITY APPLN. INFO.: JP 2001-259250

2001
0829

<--

ED Entered STN: 12 Mar 2003

AB Title strengthening composition, for papermaking from a pulp slurry of elec. conductivity ≥ 0.8 mS/cm, comprises (A) amphoteric polyacrylamides containing α, β -unsatd. sulfonic acids (sulfonates) 0.01-5 and crosslinkable monomers 0.001-5 mol%, (B) anionic polyacrylamides, and (C) water-sol. aluminum compds. Thus, a pulp slurry obtained from waste corrugated paper was added with acrylamide-itaconic acid-methacryloyloxyethylidemethylbenzylammonium chloride-methylenebisacrylamide-sodium methallylsulfonate copolymer 0.6, Accurac 304E 0.03, and aluminum sulfate 1.5% and formed into a sheet showing JIS-P8126 compression factor 186 N·m²/g, Japan Tappi Number 29-78 surface compression factor 156 N·m²/g, fiber orientation factor 1,34, and permeability 26 s.

IT 501004-29-1P

RL: IMF (Industrial manufacture); NUU (Other use, unclassified);
PREP (Preparation); USES (Uses)

(acrylamide polymer-based strengthening agent for papermaking)

RN 501004-29-1 HCPLUS

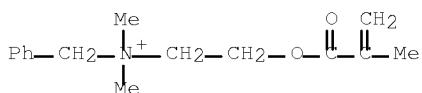
10/594,519-309792-EIC SEARCH

CN Benzenemethanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with N,N'-methylenebis[2-propenamide], methylenebutanedioic acid, 2-propenamide and sodium 2-methyl-2-propene-1-sulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 46917-07-1

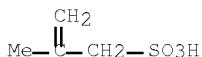
CMF C15 H22 N O2 . Cl



CM 2

CRN 1561-92-8

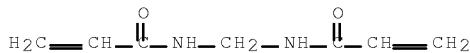
CMF C4 H8 O3 S . Na



CM 3

CRN 110-26-9

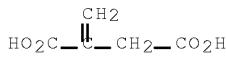
CMF C7 H10 N2 O2



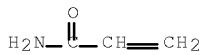
CM 4

CRN 97-65-4

CMF C5 H6 O4

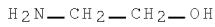


CM 5

CRN 79-06-1
CMF C3 H5 N O

IC ICM D21H017-37
 ICS C08F220-56; C08F265-10; C08K003-30; C08L033-26; D21H017-43;
 D21H017-66; D21H021-10; D21H021-18
 CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)
 IT SC1004-29-18
 RL: IMF (Industrial manufacture); NUU (Other use, unclassified);
 PREP (Preparation); USES (Uses)
 (acrylamide polymer-based strengthening agent for papermaking)

L83 ANSWER 11 OF 28 HCPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2002:516819 HCPLUS Full-text
 DOCUMENT NUMBER: 137:186842
 TITLE: Application of surfactants for treatment of
 tire rubber blends
 AUTHOR(S): Sakibaeva, S. A.; Eskaraeva, G. Z.;
 Tasanbaeva, N. E.; Sataev, I. K.
 CORPORATE SOURCE: Yuzhno-Kaz. Gos. Univ. im. M. Auezova,
 Kazakhstan
 SOURCE: O'zbekiston Kimyo Jurnali (2002),
 (1), 72-75
 CODEN: OKJZA6; ISSN: 0042-1707
 PUBLISHER: Izdatel'stvo Fan
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 ED Entered STN: 12 Jul 2002
 AB Compsns. containing water-soluble surface-active hydrolyzed (and modified) acrylonitrile-Me acrylate-itaconic acid copolymers K-4 K-9, and zeolites were used as antisticking agents for SKI-3 isoprene rubber blends. Studied surfactants exhibited good antisticking properties and cause no metal corrosion over long time periods.
 IT 141-43-50, Monoethanolamine, reaction products with
 hydrolyzed acrylonitrile-Me acrylate-itaconic acid copolymer
 27056-80-00, Acrylonitrile-methyl acrylate-itaconic acid
 copolymer, hydrolyzed, (reaction products with epoxy resin,
 triglycidyl ether, or monoethanolamine)
 RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses)
 (surfactants compns. as antisticking agents for tire rubber
 blends)
 RN 141-43-5 HCPLUS
 CN Ethanol, 2-amino- (CA INDEX NAME)



RN 27056-80-0 HCPLUS
 CN Butanedioic acid, 2-methylene-, polymer with methyl 2-propenoate
 and 2-propenenitrile (CA INDEX NAME)

CM 1

CRN 107-13-1
CMF C3 H3 N



CM 2

CRN 97-65-4
CMF C5 H6 O4

CM 3

CRN 96-33-3
CMF C4 H6 O2

CC 39-13 (Synthetic Elastomers and Natural Rubber)
 IT 341-43-50, Monoethanolamine, reaction products with
 hydrolyzed acrylonitrile-Me acrylate-itaconic acid copolymer
 9004-32-4, Carboxymethylcellulose 9038-24-8, K 4 14807-96-6,
 Talc, properties 25014-41-9D, Polyacrylonitrile, hydrolyzed
 27056-80-0D, Acrylonitrile-methyl acrylate-itaconic acid
 copolymer, hydrolyzed, (reaction products with epoxy resin,
 triglycidyl ether, or monoethanolamine) 37221-33-3, Progress
 52433-97-3, K 9
 RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses)
 (surfactants compns. as antisticking agents for tire rubber
 blends)

L83 ANSWER 12 OF 28 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2001:923659 HCAPLUS Full-text
 DOCUMENT NUMBER: 136:55575
 TITLE: Use of weakly anionic copolymers as
 dispersing and/or grinding aid agent
 of an aqueous suspension of mineral
 materials
 INVENTOR(S): Suau, Jean-Marc; Jacquemet, Christian;
 Mongoin, Jacques
 PATENT ASSIGNEE(S): Coatex S.A.S., Fr.
 SOURCE: PCT Int. Appl., 110 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----

10/594,519-309792-EIC SEARCH

WO 2001096007	A1	20011220	WO 2001-FR1804	
				2001
				0612
<--				
W: AU, BA, BG, BR, CA, CN, CO, CZ, HR, HU, ID, IN, JP, KR, MX, NO, NZ, PL, RO, RU, SI, SK, US, YU, ZA				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
FR 2810261	A1	20011221	FR 2000-7639	
				2000
				0615
<--				
FR 2810261	B1	20020830		
CA 2410518	A1	20011220	CA 2001-2410518	
				2001
				0612
<--				
BR 2001011616	A	20030318	BR 2001-11616	
				2001
				0612
<--				
EP 1294476	A1	20030326	EP 2001-945395	
				2001
				0612
<--				
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR				
TW 552337	B	20030911	TW 2001-90114132	
				2001
				0612
<--				
AU 2001267627	B2	20060803	AU 2001-267627	
				2001
				0612
<--				
EP 1762297	A2	20070314	EP 2006-23575	
				2001
				0612
<--				
EP 1762297	A3	20080305		
R: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, TR				
EP 1795265	A2	20070613	EP 2006-23550	
				2001
				0612
<--				
EP 1795265	A3	20071226		
R: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, TR				
NO 2002005809	A	20030122	NO 2002-5809	
				2002
				1203
<--				
MX 2002012162	A	20030606	MX 2002-12162	
				2002
				1209
<--				
KR 813785	B1	20080313	KR 2002-717094	
				2002
				1214
<--				
ZA 2003000153	A	20040210	ZA 2003-153	
				2003
				0107
<--				
US 20040019148	A1	20040129	US 2003-311219	
				2003

0702

<--

US 6946510	B2	20050920	
US 20050143511	A1	20050630	US 2005-46887
			2005
			0201
<--			
PRIORITY APPLN. INFO.:		FR 2000-7639	A
			2000
			0615
<--			
EP 2001-945395		A3	
			2001
			0612
<--			
WO 2001-FR1804		W	
			2001
			0612
<--			
US 2003-311219		A1	
			2003
			0702
<--			

ED Entered STN: 21 Dec 2001

AB The invention concerns the use of a weakly anionic and water soluble copolymer, as dispersing and/or grinding aid agent of pigments and/or mineral fillers in aqueous suspension providing a low zeta potential to aqueous suspensions of said fillers and/or pigments and providing electro-steric stabilization to said suspensions. The invention also concerns said aqueous suspensions of pigments and/or mineral fillers and their uses in the fields of paper industry, for making or coating paper, drilling mud for oil exploration and extraction. The invention also concerns the use of said dispersing and/or grinding aid agents in the fields of paints and plastic materials such as thermoplastic or thermosetting resins. Typical weakly anionic copolymers are manufactured from (a) ≥ 1 ethylenically unsatd. carboxylic acid selected from (meth)acrylic acid and mono-C1-4 alkyl esters of maleic or itaconic acid, (b) monoalkyl ethers of oxirane, methyloxirane, or ethyloxirane polymers having unsatd. groups on the ends opposite the ether groups, and, optionally, (c) other monomers.

IT 221881-27-2 221882-30-0
 256511-28-1 381686-32-4 381686-34-6
 381686-36-8 381686-40-4 381686-45-9
 381686-46-0 381686-47-1 381686-48-2
 381686-50-6 381686-51-7 382156-65-2
 382156-79-8 382162-06-3 382162-09-6
 382162-29-0 382162-32-5 382162-40-5
 382162-56-3 382162-58-5 382162-62-1
 382162-65-4

RL: NUU (Other use, unclassified); USES (Uses)
 (use of weakly anionic copolymers as dispersing
 and/or grinding aid agent of aqueous suspensions of
 mineral materials)

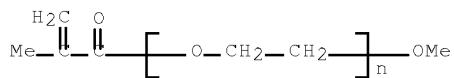
RN 221881-27-2 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with
 α -(2-methyl-1-oxo-2-propen-1-yl)- ω -methoxypoly(oxy-1,2-
 ethanediyl), graft, sodium salt (CA INDEX NAME)

CM 1

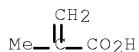
CRN 111740-39-7
 CMF (C4 H6 O2 . (C2 H4 O)n C5 H8 O2)x
 CCI PMS

CM 2

CRN 26915-72-0
 CMF (C2 H4 O)n C5 H8 O2
 CCI PMS



CM 3

CRN 79-41-4
CMF C4 H6 O2RN 221882-30-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with oxirane, methyl ether, graft, sodium salt (CA INDEX NAME)

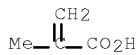
CM 1

CRN 67-56-1
CMF C H4 O

CM 2

CRN 167763-01-1
CMF (C4 H6 O2 . C2 H4 O)x
CCI PMS

CM 3

CRN 79-41-4
CMF C4 H6 O2

CM 4

CRN 75-21-8
CMF C2 H4 O

RN 256511-28-1 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with oxirane and 2-propenoic acid, methyl ether, graft, sodium salt (CA INDEX NAME)

CM 1

CRN 67-56-1
 CMF C H4 O

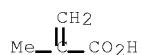


CM 2

CRN 159106-91-9
 CMF (C4 H6 O2 . C3 H4 O2 . C2 H4 O)x
 CCI PMS

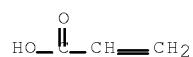
CM 3

CRN 79-41-4
 CMF C4 H6 O2



CM 4

CRN 79-10-7
 CMF C3 H4 O2



CM 5

CRN 75-21-8
 CMF C2 H4 O



RN 381686-32-4 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid,

10/594,519-309792-EIC SEARCH

α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl) and 2-propenoic acid, graft, sodium salt (9CI) (CA INDEX NAME)

CM 1

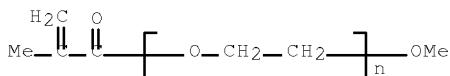
CRN 381686-31-3

CMF (C₇ H₁₃ N O₄ S . C₄ H₆ O₂ . C₃ H₄ O₂ . (C₂ H₄ O)_n C₅ H₈ O₂)_x
CCI PMS

CM 2

CRN 26915-72-0

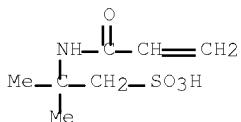
CMF (C₂ H₄ O)_n C₅ H₈ O₂
CCI PMS



CM 3

CRN 15214-89-8

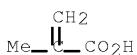
CMF C₇ H₁₃ N O₄ S



CM 4

CRN 79-41-4

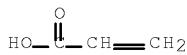
CMF C₄ H₆ O₂



CM 5

CRN 79-10-7

CMF C₃ H₄ O₂



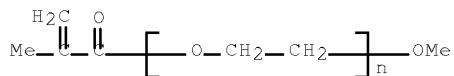
RN 381686-34-6 HCAPLUS
 CN Butanedioic acid, methylene-, polymer with
 α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-
 ethanediyl), 2-methyl-2-propenoic acid and 2-propenoic acid,
 graft, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 381686-33-5
 CMF (C₅ H₆ O₄ . C₄ H₆ O₂ . C₃ H₄ O₂ . (C₂ H₄ O)_n C₅ H₈ O₂)_x
 CCI PMS

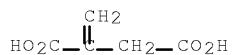
CM 2

CRN 26915-72-0
 CMF (C₂ H₄ O)_n C₅ H₈ O₂
 CCI PMS



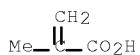
CM 3

CRN 97-65-4
 CMF C₅ H₆ O₄



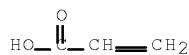
CM 4

CRN 79-41-4
 CMF C₄ H₆ O₂



CM 5

CRN 79-10-7
 CMF C₃ H₄ O₂



RN 381686-36-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with
 α -(2-methyl-1-oxo-2-propen-1-yl)- ω -methoxypoly(oxy-1,2-
ethanediyl) and 2-propenoic acid, graft, sodium salt (CA INDEX
NAME)

CM 1

CRN 381686-35-7

CMF (C4 H6 O2 . C3 H4 O2 . (C2 H4 O)n C5 H8 O2)x

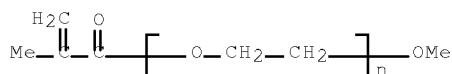
CCI PMS

CM 2

CRN 26915-72-0

CMF (C2 H4 O)n C5 H8 O2

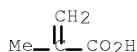
CCI PMS



CM 3

CRN 79-41-4

CMF C4 H6 O2



CM 4

CRN 79-10-7

CMF C3 H4 O2



RN 381686-40-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1,2-ethanediyl
bis(2-methyl-2-propenoate),
 α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-
ethanediyl) and 2-propenoic acid, graft, sodium salt (9CI) (CA
INDEX NAME)

CM 1

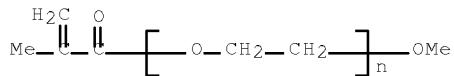
CRN 381686-39-1

CMF (C10 H14 O4 . C4 H6 O2 . C3 H4 O2 . (C2 H4 O)n C5 H8 O2)x

CCI PMS

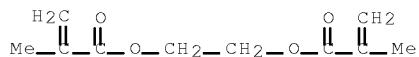
CM 2

CRN 26915-72-0
 CMF (C₂ H₄ O)_n C₅ H₈ O₂
 CCI PMS



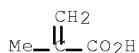
CM 3

CRN 97-90-5
 CMF C₁₀ H₁₄ O₄



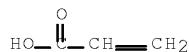
CM 4

CRN 79-41-4
 CMF C₄ H₆ O₂



CM 5

CRN 79-10-7
 CMF C₃ H₄ O₂



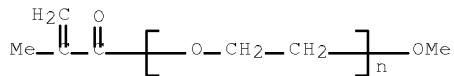
RN 381686-45-9 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with
 α-(2-methyl-1-oxo-2-propen-1-yl)-ω-methoxypoly(oxy-1,2-
 ethanediyl) and 2-propenoic acid, graft, potassium salt (CA INDEX
 NAME)

CM 1

CRN 381686-35-7
 CMF (C₄ H₆ O₂ . C₃ H₄ O₂ . (C₂ H₄ O)_n C₅ H₈ O₂)_x
 CCI PMS

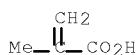
CM 2

CRN 26915-72-0
 CMF (C₂ H₄ O)_n C₅ H₈ O₂
 CCI PMS



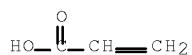
CM 3

CRN 79-41-4
 CMF C₄ H₆ O₂



CM 4

CRN 79-10-7
 CMF C₃ H₄ O₂



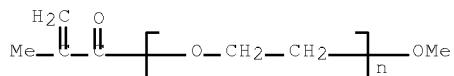
RN 381686-46-0 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with
 α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-
 ethanediyl) and 2-propenoic acid, graft, ammonium salt (9CI) (CA
 INDEX NAME)

CM 1

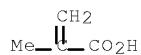
CRN 381686-35-7
 CMF (C₄ H₆ O₂ . C₃ H₄ O₂ . (C₂ H₄ O)_n C₅ H₈ O₂)_x
 CCI PMS

CM 2

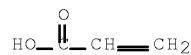
CRN 26915-72-0
 CMF (C₂ H₄ O)_n C₅ H₈ O₂
 CCI PMS



CM 3

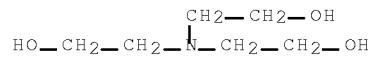
CRN 79-41-4
CMF C4 H6 O2

CM 4

CRN 79-10-7
CMF C3 H4 O2

RN 381686-47-1 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with
 α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl) and 2-propenoic acid, graft, compd. with 2,2',2'''-nitrilotris[ethanol] (9CI) (CA INDEX NAME)

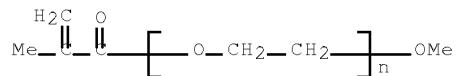
CM 1

CRN 102-71-6
CMF C6 H15 N O3

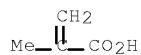
CM 2

CRN 381686-35-7
CMF (C4 H6 O2 . C3 H4 O2 . (C2 H4 O)n C5 H8 O2)x
CCI PMS

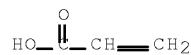
CM 3

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS

CM 4

CRN 79-41-4
CMF C4 H6 O2

CM 5

CRN 79-10-7
CMF C3 H4 O2

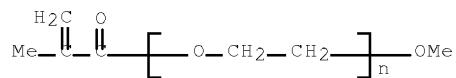
RN 381686-48-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with
α-(2-methyl-1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-
ethanediyl) and 2-propenoic acid, graft, lithium salt (9CI) (CA
INDEX NAME)

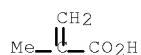
CM 1

CRN 381686-35-7
CMF (C4 H6 O2 . C3 H4 O2 . (C2 H4 O)n C5 H8 O2)x
CCI PMS

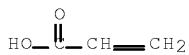
CM 2

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS

CM 3

CRN 79-41-4
CMF C4 H6 O2

CM 4

CRN 79-10-7
CMF C3 H4 O2

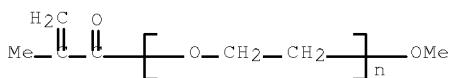
RN 381686-50-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with
 α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-
ethanediyl) and 2-propenoic acid, graft, calcium sodium salt (9CI)
(CA INDEX NAME)

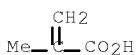
CM 1

CRN 381686-35-7
CMF (C4 H6 O2 . C3 H4 O2 . (C2 H4 O)n C5 H8 O2)x
CCI PMS

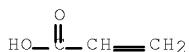
CM 2

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS

CM 3

CRN 79-41-4
CMF C4 H6 O2

CM 4

CRN 79-10-7
CMF C3 H4 O2

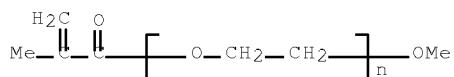
RN 381686-51-7 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with
 α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-
 ethanediyl) and 2-propenoic acid, graft, magnesium sodium salt
 (9CI) (CA INDEX NAME)

CM 1

CRN 381686-35-7
 CMF (C4 H6 O2 . C3 H4 O2 . (C2 H4 O)n C5 H8 O2)x
 CCI PMS

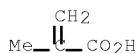
CM 2

CRN 26915-72-0
 CMF (C2 H4 O)n C5 H8 O2
 CCI PMS



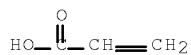
CM 3

CRN 79-41-4
 CMF C4 H6 O2



CM 4

CRN 79-10-7
 CMF C3 H4 O2



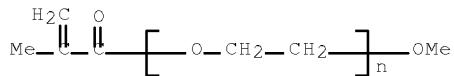
RN 382156-65-2 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with 2-hydroxyethyl
 2-methyl-2-propenoate phosphate and
 α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-
 ethanediyl), graft, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 382156-64-1
 CMF (C6 H10 O3 . C4 H6 O2 . (C2 H4 O)n C5 H8 O2 . x H3 O4 P)x
 CCI PMS

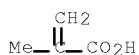
CM 2

CRN 26915-72-0
 CMF (C₂ H₄ O)_n C₅ H₈ O₂
 CCI PMS



CM 3

CRN 79-41-4
 CMF C₄ H₆ O₂

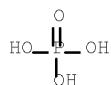


CM 4

CRN 52628-03-2
 CMF C₆ H₁₀ O₃ . x H₃ O₄ P

CM 5

CRN 7664-38-2
 CMF H₃ O₄ P



CM 6

CRN 868-77-9
 CMF C₆ H₁₀ O₃



RN 382156-79-8 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with 2-hydroxyethyl
 2-methyl-2-propenoate phosphate and oxirane, methyl ether, graft,
 sodium salt (9CI) (CA INDEX NAME)

10/594,519-309792-EIC SEARCH

CM 1

CRN 67-56-1
CMF C H4 O

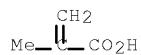


CM 2

CRN 382156-78-7
CMF (C₆ H₁₀ O₃ . C₄ H₆ O₂ . C₂ H₄ O . x H₃ O₄ P)x
CCI PMS

CM 3

CRN 79-41-4
CMF C₄ H₆ O₂



CM 4

CRN 75-21-8
CMF C₂ H₄ O

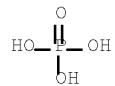


CM 5

CRN 52628-03-2
CMF C₆ H₁₀ O₃ . x H₃ O₄ P

CM 6

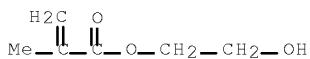
CRN 7664-38-2
CMF H₃ O₄ P



CM 7

CRN 868-77-9

CMF C6 H10 O3



RN 382162-06-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with
 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid,
 oxirane and 2-propenoic acid, methyl ether, graft, sodium salt
 (9CI) (CA INDEX NAME)

CM 1

CRN 67-56-1
 CMF C H4 O

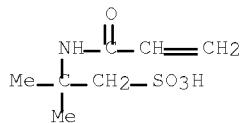


CM 2

CRN 256511-25-8
 CMF (C7 H13 N O4 S . C4 H6 O2 . C3 H4 O2 . C2 H4 O)x
 CCI PMS

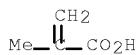
CM 3

CRN 15214-89-8
 CMF C7 H13 N O4 S



CM 4

CRN 79-41-4
 CMF C4 H6 O2

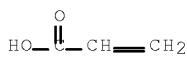


CM 5

CRN 79-10-7

10/594,519-309792-EIC SEARCH

CMF C3 H4 O2



CM 6

CRN 75-21-8
CMF C2 H4 O

RN 382162-09-6 HCAPLUS
 CN Butanedioic acid, methylene-, polymer with 2-methyl-2-propenoic acid, oxirane and 2-propenoic acid, methyl ether, graft, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 67-56-1
CMF C H4 O

CM 2

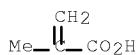
CRN 382162-08-5
CMF (C5 H6 O4 . C4 H6 O2 . C3 H4 O2 . C2 H4 O)x
CCI PMS

CM 3

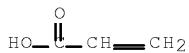
CRN 97-65-4
CMF C5 H6 O4

CM 4

CRN 79-41-4
CMF C4 H6 O2



CM 5

CRN 79-10-7
CMF C3 H4 O2

CM 6

CRN 75-21-8
CMF C2 H4 O

RN 382162-29-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1,2-ethanediyl bis(2-methyl-2-propenoate), oxirane and 2-propenoic acid, methyl ether, graft, sodium salt (9CI) (CA INDEX NAME)

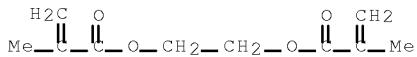
CM 1

CRN 67-56-1
CMF C H4 O

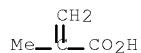
CM 2

CRN 382162-28-9
CMF (C10 H14 O4 . C4 H6 O2 . C3 H4 O2 . C2 H4 O)x
CCI PMS

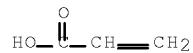
CM 3

CRN 97-90-5
CMF C10 H14 O4

CM 4

CRN 79-41-4
CMF C4 H6 O2

CM 5

CRN 79-10-7
CMF C3 H4 O2

CM 6

CRN 75-21-8
CMF C2 H4 ORN 382162-32-5 HCPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with oxirane and 2-propenoic acid, methyl ether, graft, potassium salt (CA INDEX NAME)

CM 1

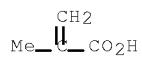
CRN 67-56-1
CMF C H4 O

CM 2

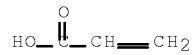
CRN 159106-91-9
CMF (C4 H6 O2 . C3 H4 O2 . C2 H4 O)x
CCI PMS

CM 3

CRN 79-41-4
CMF C4 H6 O2



CM 4

CRN 79-10-7
CMF C3 H4 O2

CM 5

CRN 75-21-8
CMF C2 H4 O

RN 382162-40-5 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with oxirane and 2-propenoic acid, methyl ether, graft, ammonium salt (9CI) (CA INDEX NAME)

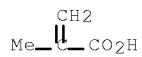
CM 1

CRN 67-56-1
CMF C H4 O

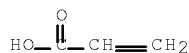
CM 2

CRN 159106-91-9
CMF (C4 H6 O2 . C3 H4 O2 . C2 H4 O)x
CCI PMS

CM 3

CRN 79-41-4
CMF C4 H6 O2

CM 4

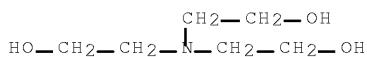
CRN 79-10-7
CMF C3 H4 O2

CM 5

CRN 75-21-8
CMF C2 H4 O

RN 382162-56-3 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with oxirane and 2-propenoic acid, methyl ether, graft, compd. with 2,2',2'''-nitrilotris[ethanol] (9CI) (CA INDEX NAME)

CM 1

CRN 102-71-6
CMF C6 H15 N O3

CM 2

CRN 381164-42-7
CMF (C4 H6 O2 . C3 H4 O2 . C2 H4 O)x . x C H4 O

CM 3

CRN 67-56-1
CMF C H4 O

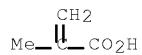
CM 4

CRN 159106-91-9
CMF (C4 H6 O2 . C3 H4 O2 . C2 H4 O)x
CCI PMS

10/594,519-309792-EIC SEARCH

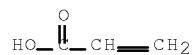
CM 5

CRN 79-41-4
CMF C4 H6 O2



CM 6

CRN 79-10-7
CMF C3 H4 O2



CM 7

CRN 75-21-8
CMF C2 H4 O



RN 382162-58-5 HCPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with oxirane and 2-propenoic acid, methyl ether, graft, lithium salt (9CI) (CA INDEX NAME)

CM 1

CRN 67-56-1
CMF C H4 O

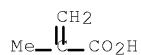


CM 2

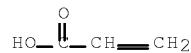
CRN 159106-91-9
CMF (C4 H6 O2 . C3 H4 O2 . C2 H4 O)x
CCI PMS

CM 3

CRN 79-41-4
CMF C4 H6 O2



CM 4

CRN 79-10-7
CMF C3 H4 O2

CM 5

CRN 75-21-8
CMF C2 H4 O

RN 382162-62-1 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with oxirane and 2-propenoic acid, methyl ether, graft, calcium sodium salt (9CI) (CA INDEX NAME)

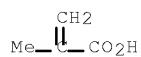
CM 1

CRN 67-56-1
CMF C H4 O

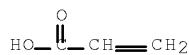
CM 2

CRN 159106-91-9
CMF (C4 H6 O2 . C3 H4 O2 . C2 H4 O)x
CCI PMS

CM 3

CRN 79-41-4
CMF C4 H6 O2

CM 4

CRN 79-10-7
CMF C3 H4 O2

CM 5

CRN 75-21-8
CMF C2 H4 O

RN 382162-65-4 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with oxirane and 2-propenoic acid, methyl ether, graft, magnesium sodium salt (9CI) (CA INDEX NAME)

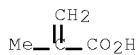
CM 1

CRN 67-56-1
CMF C H4 O

CM 2

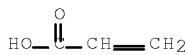
CRN 159106-91-9
CMF (C4 H6 O2 . C3 H4 O2 . C2 H4 O)x
CCI PMS

CM 3

CRN 79-41-4
CMF C4 H6 O2

CM 4

CRN 79-10-7
CMF C3 H4 O2



CM 5

CRN 75-21-8
CMF C2 H4 O

IC ICM B01F017-52
 ICS D21H019-58; D21H019-60; C09K007-02; D21H017-43; C08F220-00;
 C08F222-00; C09C003-04; B01F017-00; C09D007-02

CC 46-4 (Surface Active Agents and Detergents)
 Section cross-reference(s): 37, 42, 43, 51

ST dispersing agent mineral material water unsatd
 polyoxyalkylene ether copolymer; drilling mud polymeric
 dispersing agent; plastic compn polymeric
 dispersing agent; paint waterborne polymeric
 dispersing agent; paper coating waterborne polymeric
 dispersing agent; itaconate monoester copolymer
 dispersing agent mineral material water; maleate monoester
 copolymer dispersing agent mineral material water;
 methacrylic acid copolymer dispersing agent mineral
 material water; acrylic acid copolymer dispersing agent
 mineral material water

IT Chalk
 RL: PEP (Physical, engineering or chemical process); PYP (Physical
 process); PROC (Process)
 (Etiquette Violette; use of weakly anionic copolymers as
 dispersing and/or grinding aid agent of aqueous
 suspensions of mineral materials)

IT Kaolin, processes
 RL: PEP (Physical, engineering or chemical process); PYP (Physical
 process); PROC (Process)
 (SPS; use of weakly anionic copolymers as dispersing
 and/or grinding aid agent of aqueous suspensions of
 mineral materials)

IT Polyoxyalkylenes, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (acrylic, graft, anionic; use of weakly anionic copolymers as
 dispersing and/or grinding aid agent of aqueous
 suspensions of mineral materials)

IT Plastics, miscellaneous
 RL: MSC (Miscellaneous)
 (thermoplastics; use of weakly anionic copolymers as
 dispersing and/or grinding aid agent of aqueous
 suspensions of mineral materials for thermoplastic
 molding compns.)

IT Plastics, miscellaneous
 RL: MSC (Miscellaneous)
 (thermosetting; use of weakly anionic copolymers as
 dispersing and/or grinding aid agent of aqueous
 suspensions of mineral materials for thermosetting
 molding compns.)

IT Polyesters, uses

RL: POF (Polymer in formulation); USES (Uses)
 (unsatd.; use of weakly anionic copolymers as dispersing and/or grinding aid agent of aqueous suspensions of mineral materials for thermosetting polymer molding compns.)

IT Dispersing agents
 Fillers
 Pigments, nonbiological
 (use of weakly anionic copolymers as dispersing and/or grinding aid agent of aqueous suspensions of mineral materials)

IT Ionomers
 RL: NUU (Other use, unclassified); USES (Uses)
 (use of weakly anionic copolymers as dispersing and/or grinding aid agent of aqueous suspensions of mineral materials)

IT Limestone, processes
 Marble
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)
 (use of weakly anionic copolymers as dispersing and/or grinding aid agent of aqueous suspensions of mineral materials)

IT Drilling fluids
 (use of weakly anionic copolymers as dispersing and/or grinding aid agent of aqueous suspensions of mineral materials for drilling muds)

IT Paper
 (use of weakly anionic copolymers as dispersing and/or grinding aid agent of aqueous suspensions of mineral materials for paper coatings)

IT Paints
 (water-thinned; use of weakly anionic copolymers as dispersing and/or grinding aid agent of aqueous suspensions of mineral materials for paints)

IT Coating materials
 (water-thinned; use of weakly anionic copolymers as dispersing and/or grinding aid agent of aqueous suspensions of mineral materials for paper coatings)

IT 471-34-1, Calcium carbonate, uses
 RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process); USES (Uses)
 (DP 800G, Socal P 3; use of weakly anionic copolymers as dispersing and/or grinding aid agent of aqueous suspensions of mineral materials)

IT 9003-07-0, Appryl 3120MN1
 RL: POF (Polymer in formulation); USES (Uses)
 (PPH 310MN1; use of weakly anionic copolymers as dispersing and/or grinding aid agent of aqueous suspensions of mineral materials for thermoplastic polymer molding compns.)

IT 13463-67-7, Titanox RHD 2, processes
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)
 (RHD 2; use of weakly anionic copolymers as dispersing and/or grinding aid agent of aqueous suspensions of mineral materials)

IT 9003-55-8D, carboxylated
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (coatings; use of weakly anionic copolymers as dispersing and/or grinding aid agent of aqueous suspensions of mineral materials for paper coatings)

IT 25767-47-9, Rhodopas DS 910
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

10/594,519-309792-EIC SEARCH

(paints; use of weakly anionic copolymers as dispersing and/or grinding aid agent of aqueous suspensions of mineral materials for paints)

IT 9004-74-4D, Polyethylene glycol monomethyl ether, methacrylurethane derivs., graft polymers with ethylene glycol methacrylate phosphate, Et acrylate, and acrylic acid, sodium salts 221881-27-2 221882-30-0
 256511-28-1 291536-34-0 381164-42-7
 381686-32-4 381686-34-6 381686-35-7
 381686-36-8 381686-38-0 381686-40-4
 381686-42-6 381686-44-8 381686-45-9
 381686-46-0 381686-47-1 381686-48-2
 381686-49-3 381686-50-6 381686-51-7
 382156-63-0 382156-65-2 382156-79-8
 382162-06-3 382162-09-6 382162-29-0
 382162-30-3 382162-31-4 382162-32-5
 382162-40-5 382162-56-3 382162-58-5
 382162-59-6 382162-62-1 382162-65-4
 RL: NUU (Other use, unclassified); USES (Uses)
 (use of weakly anionic copolymers as dispersing and/or grinding aid agent of aqueous suspensions of mineral materials)

IT 1309-42-8, Magnesium hydroxide 16389-88-1, Dolomite, processes
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)
 (use of weakly anionic copolymers as dispersing and/or grinding aid agent of aqueous suspensions of mineral materials)

IT 207973-61-3 314065-74-2
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (use of weakly anionic copolymers as dispersing and/or grinding aid agent of aqueous suspensions of mineral materials for paper coatings)

IT 519154-57-5, DL 950
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (use of weakly anionic copolymers as dispersing and/or grinding aid agent of aqueous suspensions of mineral materials for thermosetting molding compns.)

IT 382600-66-0, Palapreg P 18
 RL: POF (Polymer in formulation); USES (Uses)
 (use of weakly anionic copolymers as dispersing and/or grinding aid agent of aqueous suspensions of mineral materials for thermosetting polymer molding compns.)

OS.CITING REF COUNT: 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L83 ANSWER 13 OF 28 HCPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2001:220337 HCPLUS Full-text
 DOCUMENT NUMBER: 134:253943
 TITLE: Interlayer bonding improvers for paper with low impact in the cost of manufacture and on sludge treatment plant
 INVENTOR(S): Matsuoka, Hideomi; Obokata, Takao; Kono, Koji; Hirasawa, Takahito
 PATENT ASSIGNEE(S): Nippon P.M.C. K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

10/594,519-309792-EIC SEARCH

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001081697	A	20010327	JP 2000-211007	2000 0712

PRIORITY APPLN. INFO.:	JP 1999-198354	A
	1999 0713	

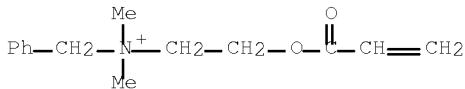
<--

ED Entered STN: 28 Mar 2001
 AB The agents are obtained from the water-soluble polysaccharides containing alginic acid and acrylamide based polymers as reaction products or mixts. Thus, adding ULV 20 (Na alginate) 14.79 to a mixture of water 699.89, 50% aqueous solution of acrylamide 221.79, 76% aqueous solution of acryloyloxyethylidemethylbenzylammonium chloride 29.15, 1% N,N-methylenebisacrylamide aqueous solution 6.33 and 5% Na methallylsulfonate aqueous solution 9.87, combining with 5% ammonium persulfate aqueous solution 3.75 parts and heating at 80° for 2 h gave a solution for improving paper interlayer bonding strength.
 IT 331466-26-3P, Acrylamide-
 acryloyloxyethylidemethylbenzylammonium chloride-itaconic
 acid-methylenebisacrylamide-sodium methallylsulfonate copolymer
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical
 or engineered material use); PREP (Preparation); USES (Uses)
 (interlayer bonding improvers for paper with low impact in cost
 of manufacture and on sludge treatment plant)
 RN 331466-26-3 HCPLUS
 CN Benzenemethanaminium, N,N-dimethyl-N-[2-[(1-oxo-2-
 propenyl)oxy]ethyl]-, chloride, polymer with
 N,N'-methylenebis[2-propenamide], methylenebutanedioic acid,
 2-propenamide and sodium 2-methyl-2-propene-1-sulfonate (9CI) (CA
 INDEX NAME)

CM 1

CRN 46830-22-2

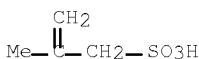
CMF C14 H20 N O2 . Cl

● Cl⁻

CM 2

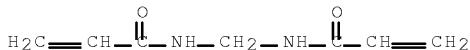
CRN 1561-92-8

CMF C4 H8 O3 S . Na

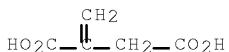


● Na

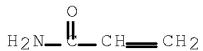
CM 3

CRN 110-26-9
CMF C7 H10 N2 O2

CM 4

CRN 97-65-4
CMF C5 H6 O4

CM 5

CRN 79-06-1
CMF C3 H5 N O

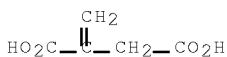
IC ICM D21H021-18
 ICS C08F002-44; C08F251-00; D21H017-30; D21H017-37; D21H027-00
 CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)
 IT 331466-25-2P, Acrylamide-acryloyloxyethyltrimethylbenzylammonium
 chloride-methylenebisacrylamide-sodium methallylsulfonate
 copolymer 331466-26-3P,
 Acrylamide-acryloyloxyethyltrimethylbenzylammonium
 chloride-itaconic acid-methylenebisacrylamide-sodium
 methallylsulfonate copolymer 331466-27-4P,
 Acrylamide-acryloyloxyethyltrimethylbenzylammonium chloride-sodium
 methallylsulfonate copolymer
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical
 or engineered material use); PREP (Preparation); USES (Uses)
 (interlayer bonding improvers for paper with low impact in cost
 of manufacture and on sludge treatment plant)
 OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE
 THIS RECORD (2 CITINGS)

L83 ANSWER 14 OF 28 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2001:207952 HCAPLUS Full-text
 DOCUMENT NUMBER: 134:239306
 TITLE: Wax compositions for aqueous applications
 INVENTOR(S): Heinrichs, Franz-Leo
 PATENT ASSIGNEE(S): Clariant G.m.b.H., Germany
 SOURCE: Eur. Pat. Appl., 8 pp.
 CODEN: EPXXDW

DOCUMENT TYPE: **Patent**
 LANGUAGE: **German**
 FAMILY ACC. NUM. COUNT: **1**
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1085054	A2	20010321	EP 2000-117405	2000 0811
<--				
EP 1085054	A3	20030502		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
DE 19942962	A1	20010628	DE 1999-19942962	1999 0909
<--				
DE 19942962	B4	20041223		
JP 2001106918	A	20010417	JP 2000-242135	2000 0810
<--				
CN 1288025	A	20010321	CN 2000-126941	2000 0908
<--				
US 6391189	B1	20020521	US 2000-658308	2000 0908
<--				
PRIORITY APPLN. INFO.:				
DE 1999-19942962 A 1999 0909				
<--				

ED Entered STN: 22 Mar 2001
 AB The title compns., which contain no H₂O-soluble emulsifiers or permanent soaps and give aqueous pastes forming H₂O-resistant, nontacky, elastic films on leather, contain ester, acid, and alc. components of specified composition 10-80% each. A mixture of trimethylolpropane complex ester 45.4, montan wax acids 27.3, and wax alc. (Unilline 425) 27.3% was mixed (22 parts) with paraffin wax 10, diethylenetriamine 1, N-methylglucamine 2, and H₂O 165 parts to give a suitable composition 97-65-40, Itaconic acid, complex esters 311-42-20, Diethanolamine, complex esters
 RL: TEM (Technical or engineered material use); USES (Uses) (wax compns. for aqueous applications)
 RN 97-65-4 HCPLUS
 CN Butanedioic acid, 2-methylene- (CA INDEX NAME)



RN 111-42-2 HCPLUS
 CN Ethanol, 2,2'-iminobis- (CA INDEX NAME)



IC ICM C08L091-06
 ICS C08L091-08
 CC 45-3 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
 IT 50-70-4D, Sorbitol, complex esters 77-92-9D, Citric acid, complex esters 77-99-6D, Trimethylolpropane, complex esters 87-69-4D, Tartaric acid, complex esters, uses 88-99-3D, Phthalic acid, complex esters 97-65-4D, Itaconic acid, complex esters 100-21-0D, Terephthalic acid, complex esters 110-16-7D, Maleic acid, complex esters 111-20-6D, Sebacic acid, complex esters 111-43-2D, Diethanolamine, complex esters 115-77-5D, Pentaerythritol, complex esters 124-04-9D, Adipic acid, complex esters 693-23-2D, Dodecanedioic acid, complex esters 6284-40-8, N-Methylglucamine 6915-15-7D, Malic acid, complex esters 59113-36-9D, Diglycerol, complex esters 118058-39-2, Uniline 425
 RL: TEM (Technical or engineered material use); USES (Uses) (wax compns. for aqueous applications)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L83 ANSWER 15 OF 28 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2001:101050 HCAPLUS Full-text
 DOCUMENT NUMBER: 134:164625
 TITLE: Recording method comprising printing recording medium with two liquid components
 INVENTOR(S): Kubota, Kazuhide; Oyanagi, Takashi; Miyabayashi, Toshiyuki
 PATENT ASSIGNEE(S): Seiko Epson Corp., Japan
 SOURCE: PCT Int. Appl., 137 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001008895	A1	20010208	WO 2000-JP5150	2000 0731
<--				
EP 1125760	A1	20010822	EP 2000-949945	2000 0731
<--				
EP 1125760	B1	20060517		
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 3622910	B2	20050223	JP 2001-513596	2000 0731
<--				
AT 326354	T	20060615	AT 2000-949945	2000 0731
<--				
US 20030069329	A1	20030410	US 2002-56231	2002 0125
<--				
US 7040747	B2	20060509	JP 1999-217296	A

PRIORITY APPLN. INFO.:

		1999
		0730
<--		
JP	2000-7135	A
		2000
		0114
<--		
JP	2000-211821	A
		2000
		0712
<--		
JP	2000-222966	A
		2000
		0724
<--		
JP	2000-224002	A
		2000
		0725
<--		
JP	2000-224141	A
		2000
		0725
<--		
WO	2000-JP5150	W
		2000
		0731
<--		
JP	2001-20737	A
		2001
		0129
<--		
US	2001-806273	A2
		2001
		0328
<--		

ED Entered STN: 09 Feb 2001

AB Title recording method for providing a good image with excellent adhesion to a recording medium and friction-resistance comprises printing by using an ink composition comprising a colorant, resin ~~emulsion~~ particles, a ~~water-soluble~~ organic solvent and water, and a reacting liquid comprising a reactant producing a coagulation upon contacting with the above ink composition to adhere to a recording medium, wherein the method comprises the steps of making the reacting liquid to adhere to the recording medium, then attaching the ink composition to the medium to print an image, and washing the recording medium printed with a polar solvent. Thus an ink composition comprising (1) a reacting liquid containing Mg(NO₃)₂·6H₂O, triethylene glycol Bu monoether, glycerin, and ion exchanged water, (2) a black ink composition containing carbon black MA 7, styrene-acrylic acid copolymer, styrene-2-ethylhexyl acrylate-methacrylic acid copolymer-sodium dodecylbenzenesulfonate ~~emulsion~~, glycerin, and ion exchanged water, and (3) a color ink set containing cyan, magenta, and yellow inks was prepared for printing test, showing good image quality and good adhesion to medium after washing and heating.

IT 324575-78-2P 324575-82-8P
 324575-89-5P, Butyl acrylate-2-hydroxyethyl acrylate-1,6-hexanediol dimethacrylate-methacrylic acid-styrene copolymer ammonium salt 324575-91-9P, Acrylamide-lauryl methacrylate-methacrylic acid-styrene copolymer ammonium salt 324575-93-1P, Acrylamide-butyl acrylate-ethylene glycol dimethacrylate-methacrylic acid-styrene copolymer ammonium salt 324575-95-3P 324575-97-5P, Acrylamide-butyl acrylate-diethylene glycol dimethacrylate-methacrylic acid-styrene copolymer ammonium salt 324575-98-6P, Acrylamide-butyl acrylate-glycidyl methacrylate-methacrylic acid-styrene copolymer ammonium salt 324576-00-3P, Butyl acrylate-methacrylic acid-styrene-trifluoroethyl methacrylate copolymer ammonium salt 324576-03-6P, Acrylamide-butyl acrylate-ethylene glycol dimethacrylate-heptadecafluorodecyl methacrylate-methacrylic

acid-styrene copolymer ammonium salt 324576-08-1P,
 Acrylamide-butyl acrylate-methacrylic
 acid-styrene-2,2,3,3-tetrafluoropropyl methacrylate copolymer
 ammonium salt 324576-10-SP, Acrylamide-butyl
 acrylate-glycidyl methacrylate-methacrylic
 acid-perfluoroctylethyl methacrylate-styrene copolymer ammonium
 salt 324576-13-SP, Acrylamide-ethylene glycol
 dimethacrylate-methacrylic acid-methyl
 methacrylate-styrene-trifluoroethyl methacrylate copolymer
 ammonium salt 324576-16-1P, Butyl
 acrylate-methacryloyldiacetyl methane-methacrylic acid-styrene
 copolymer ammonium salt 324576-18-3P,
 2-Acetoacetoxyethyl methacrylate-acrylamide-lauryl
 methacrylate-methacrylic acid-styrene copolymer ammonium salt
 324576-21-8P, 2-Acetoacetoxyethyl
 methacrylate-acrylamide-butyl acrylate-ethylene glycol
 dimethacrylate-methacrylic acid-styrene copolymer ammonium salt
 324576-29-6P, 2-Acetoacetoxyethyl
 methacrylate-acrylamide-butyl acrylate-methacrylic acid-styrene
 copolymer ammonium salt 324576-29-6P, Acrylamide-butyl
 acrylate-diethyl methacryloylmalonate-glycidyl
 methacrylate-methacrylic acid-styrene copolymer ammonium salt
 RL: IMF (Industrial manufacture); POF (Polymer in formulation);
 PRP (Properties); TEM (Technical or engineered material use); PREP
 (Preparation); USES (Uses)
 (emulsion, ink containing; preparation and properties of
 printing ink composition with two liquid components)

RN 324575-78-2 HCPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with
 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl
 2-methyl-2-propenoate, butyl 2-propenoate, ethenylbenzene,
 oxiranylmethyl 2-methyl-2-propenoate,
 1,2,2,6,6-pentamethyl-4-piperidinyl 2-methyl-2-propenoate and
 2-propenamide, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 324575-77-1

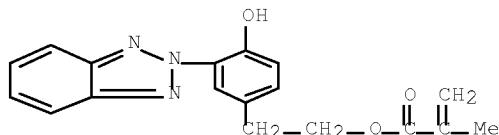
CMF (C18 H17 N3 O3 . C14 H25 N O2 . C8 H8 . C7 H12 O2 . C7 H10 O3
 . C4 H6 O2 . C3 H5 N O)x

CCI PMS

CM 2

CRN 96478-09-0

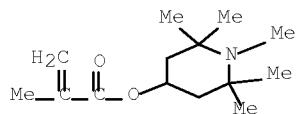
CMF C18 H17 N3 O3



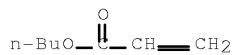
CM 3

CRN 68548-08-3

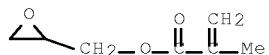
CMF C14 H25 N O2



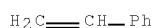
CM 4

CRN 141-32-2
CMF C7 H12 O2

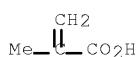
CM 5

CRN 106-91-2
CMF C7 H10 O3

CM 6

CRN 100-42-5
CMF C8 H8

CM 7

CRN 79-41-4
CMF C4 H6 O2

CM 8

CRN 79-06-1
CMF C3 H5 N O



RN 324575-82-8 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with
 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl
 2-methyl-2-propenoate, butyl 2-propenoate, 1,2-ethanediyl
 bis(2-methyl-2-propenoate), ethenylbenzene, oxiranylmethyl
 2-methyl-2-propenoate, 1,2,2,6,6-pentamethyl-4-piperidinyl
 2-methyl-2-propenoate, 2-propenamide and 2-sulfoethyl
 2-methyl-2-propenoate sodium salt, ammonium salt (9CI) (CA INDEX
 NAME)

CM 1

CRN 324575-81-7

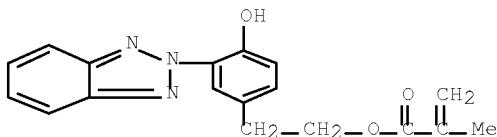
CMF (C18 H17 N3 O3 . C14 H25 N O2 . C10 H14 O4 . C8 H8 . C7 H12
 O2 . C7 H10 O3 . C6 H10 O5 S . C4 H6 O2 . C3 H5 N O . Na)x

CCI PMS

CM 2

CRN 96478-09-0

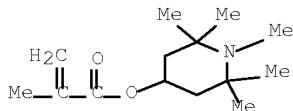
CMF C18 H17 N3 O3



CM 3

CRN 68548-08-3

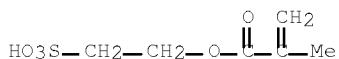
CMF C14 H25 N O2



CM 4

CRN 1804-87-1

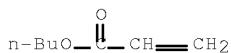
CMF C6 H10 O5 S . Na



Na

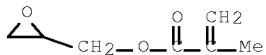
CM 5

CRN 141-32-2
CMF C7 H12 O2



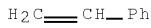
CM 6

CRN 106-91-2
CMF C7 H10 O3



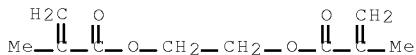
CM 7

CRN 100-42-5
CMF C8 H8



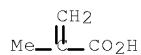
CM 8

CRN 97-90-5
CMF C10 H14 04



CM 9

CRN 79-41-4
CMF C4 H6 O2



CM 10

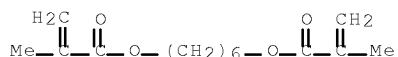
CRN 79-06-1
CMF C3 H5 N O

RN 324575-89-5 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene, 1,6-hexanediyl bis(2-methyl-2-propenoate) and 2-hydroxyethyl 2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

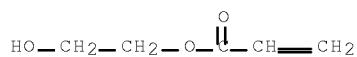
CM 1

CRN 324575-88-4
CMF (C14 H22 O4 . C8 H8 . C7 H12 O2 . C5 H8 O3 . C4 H6 O2)x
CCI PMS

CM 2

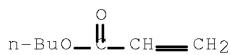
CRN 6606-59-3
CMF C14 H22 O4

CM 3

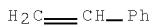
CRN 818-61-1
CMF C5 H8 O3

CM 4

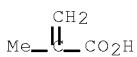
CRN 141-32-2
CMF C7 H12 O2



CM 5

CRN 100-42-5
CMF C8 H8

CM 6

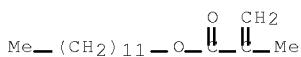
CRN 79-41-4
CMF C4 H6 O2

RN 324575-91-9 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with dodecyl
 2-methyl-2-propenoate, ethenylbenzene and 2-propenamide, ammonium
 salt (9CI) (CA INDEX NAME)

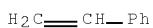
CM 1

CRN 324575-90-8
 CMF (C16 H30 O2 . C8 H8 . C4 H6 O2 . C3 H5 N O)x
 CCI PMS

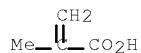
CM 2

CRN 142-90-5
 CMF C16 H30 O2

CM 3

CRN 100-42-5
CMF C8 H8

CM 4

CRN 79-41-4
CMF C4 H6 O2

CM 5

CRN 79-06-1
CMF C3 H5 N O

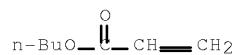
RN 324575-93-1 HCPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,
1,1'-(1,2-ethanediyl) bis(2-methyl-2-propenoate), ethenylbenzene
and 2-methyl-2-propenoic acid, ammonium salt (CA INDEX NAME)

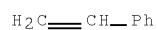
CM 1

CRN 324575-92-0
CMF (C10 H14 O4 . C8 H8 . C7 H12 O2 . C4 H6 O2 . C3 H5 N O)x
CCI PMS

CM 2

CRN 141-32-2
CMF C7 H12 O2

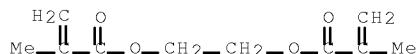
CM 3

CRN 100-42-5
CMF C8 H8

CM 4

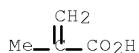
10/594,519-309792-EIC SEARCH

CRN 97-90-5
 CMF C10 H14 O4



CM 5

CRN 79-41-4
 CMF C4 H6 O2



CM 6

CRN 79-06-1
 CMF C3 H5 N O



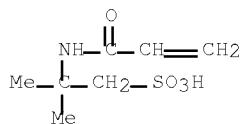
RN 324575-95-3 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 1,2-ethanediyl bis(2-methyl-2-propenoate), ethenylbenzene and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 324575-94-2
 CMF (C10 H14 O4 . C8 H8 . C7 H13 N O4 S . C7 H12 O2 . C4 H6 O2)x
 CCI PMS

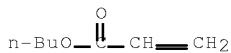
CM 2

CRN 15214-89-8
 CMF C7 H13 N O4 S



CM 3

CRN 141-32-2
 CMF C7 H12 O2



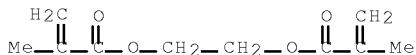
CM 4

CRN 100-42-5
 CMF C8 H8



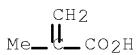
CM 5

CRN 97-90-5
 CMF C10 H14 O4



CM 6

CRN 79-41-4
 CMF C4 H6 O2



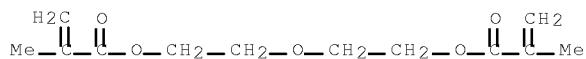
RN 324575-97-5 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene, oxydi-2,1-ethanediyl bis(2-methyl-2-propenoate) and 2-propenamide, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 324575-96-4
 CMF (C12 H18 O5 . C8 H8 . C7 H12 O2 . C4 H6 O2 . C3 H5 N O)x
 CCI PMS

CM 2

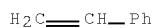
CRN 2358-84-1
 CMF C12 H18 O5



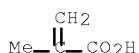
CM 3

CRN 141-32-2
CMF C7 H12 O2

CM 4

CRN 100-42-5
CMF C8 H8

CM 5

CRN 79-41-4
CMF C4 H6 O2

CM 6

CRN 79-06-1
CMF C3 H5 N O

RN 324575-98-6 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene, oxiranylmethyl 2-methyl-2-propenoate and 2-propenamide, ammonium salt (9CI) (CA INDEX NAME)

CM 1

10/594,519-309792-EIC SEARCH

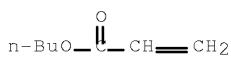
CRN 75266-11-4

CMF (C8 H8 . C7 H12 O2 . C7 H10 O3 . C4 H6 O2 . C3 H5 N O)x

CCI PMS

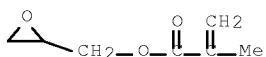
CM 2

CRN 141-32-2
CMF C7 H12 O2



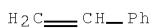
CM 3

CRN 106-91-2
CMF C7 H10 O3



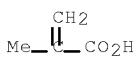
CM 4

CRN 100-42-5
CMF C8 H8



CM 5

CRN 79-41-4
CMF C4 H6 O2



CM 6

CRN 79-06-1
CMF C3 H5 N O



RN 324576-00-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene and trifluoroethyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 324575-99-7

CMF (C8 H8 . C7 H12 O2 . C6 H7 F3 O2 . C4 H6 O2)x

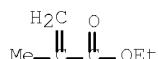
CCI PMS

CM 2

CRN 38785-10-3

CMF C6 H7 F3 O2

CCI IDS

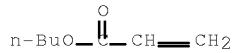


3 (D1—F)

CM 3

CRN 141-32-2

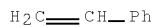
CMF C7 H12 O2



CM 4

CRN 100-42-5

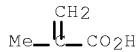
CMF C8 H8



CM 5

CRN 79-41-4

CMF C4 H6 O2



RN 324576-03-6 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,
 1,2-ethanediyl bis(2-methyl-2-propenoate), ethenylbenzene,
 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-heptadecafluorodecyl
 2-methyl-2-propenoate and 2-propenamide, ammonium salt (9CI) (CA
 INDEX NAME)

CM 1

CRN 324576-02-5

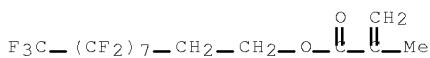
CMF (C14 H9 F17 O2 . C10 H14 O4 . C8 H8 . C7 H12 O2 . C4 H6 O2 .
 C3 H5 N O)x

CCI PMS

CM 2

CRN 1996-88-9

CMF C14 H9 F17 O2



CM 3

CRN 141-32-2

CMF C7 H12 O2



CM 4

CRN 100-42-5

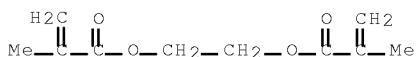
CMF C8 H8



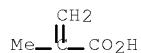
CM 5

CRN 97-90-5

CMF C10 H14 O4



CM 6

CRN 79-41-4
CMF C4 H6 O2

CM 7

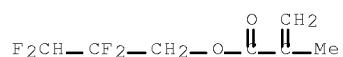
CRN 79-06-1
CMF C3 H5 N O

RN 324576-08-1 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene, 2-propenamide and 2,2,3,3-tetrafluoropropyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

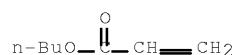
CM 1

CRN 324576-07-0
 CMF (C8 H8 . C7 H12 O2 . C7 H8 F4 O2 . C4 H6 O2 . C3 H5 N O)X
 CCI PMS

CM 2

CRN 45102-52-1
 CMF C7 H8 F4 O2

CM 3

CRN 141-32-2
 CMF C7 H12 O2

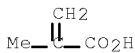
CM 4

CRN 100-42-5
 CMF C8 H8



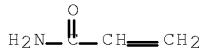
CM 5

CRN 79-41-4
 CMF C4 H6 O2



CM 6

CRN 79-06-1
 CMF C3 H5 N O



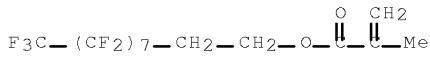
RN 324576-10-5 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and 2-propenamide, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 324576-09-2
 CMF (C14 H9 F17 O2 . C8 H8 . C7 H12 O2 . C7 H10 O3 . C4 H6 O2 . C3 H5 N O)x
 CCI PMS

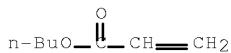
CM 2

CRN 1996-88-9
 CMF C14 H9 F17 O2



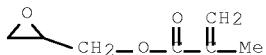
CM 3

CRN 141-32-2
 CMF C7 H12 O2



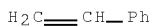
CM 4

CRN 106-91-2
 CMF C7 H10 O3



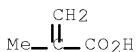
CM 5

CRN 100-42-5
 CMF C8 H8



CM 6

CRN 79-41-4
 CMF C4 H6 O2



CM 7

CRN 79-06-1
 CMF C3 H5 N O



RN 324576-13-8 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with 1,2-ethanediyl
 bis(2-methyl-2-propenoate), ethenylbenzene, methyl
 2-methyl-2-propenoate, 2-propenamide and trifluoroethyl

10/594,519-309792-EIC SEARCH

2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 324576-12-7

CMF (C10 H14 O4 . C8 H8 . C6 H7 F3 O2 . C5 H8 O2 . C4 H6 O2 . C3 H5 N O)x

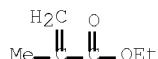
CCI PMS

CM 2

CRN 38785-10-3

CMF C6 H7 F3 O2

CCI IDS



3 (D1—F)

CM 3

CRN 100-42-5

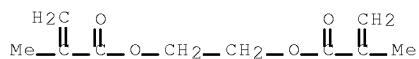
CMF C8 H8



CM 4

CRN 97-90-5

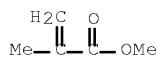
CMF C10 H14 O4



CM 5

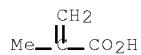
CRN 80-62-6

CMF C5 H8 O2



CM 6

CRN 79-41-4
 CMF C4 H6 O2



CM 7

CRN 79-06-1
 CMF C3 H5 N O



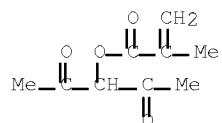
RN 324576-16-1 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with 1-acetyl-2-oxopropyl 2-methyl-2-propenoate, butyl 2-propenoate and ethenylbenzene, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 324576-15-0
 CMF (C9 H12 O4 . C8 H8 . C7 H12 O2 . C4 H6 O2)x
 CCI PMS

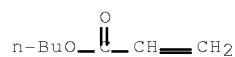
CM 2

CRN 129955-71-1
 CMF C9 H12 O4



CM 3

CRN 141-32-2
 CMF C7 H12 O2



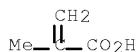
CM 4

CRN 100-42-5
 CMF C8 H8



CM 5

CRN 79-41-4
 CMF C4 H6 O2



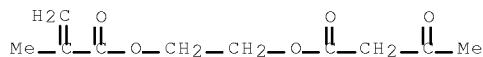
RN 324576-18-3 HCAPLUS
 CN Butanoic acid, 3-oxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with dodecyl 2-methyl-2-propenoate, ethenylbenzene, 2-methyl-2-propenoic acid and 2-propenamide, ammonium salt (9CI)
 (CA INDEX NAME)

CM 1

CRN 324576-17-2
 CMF (C16 H30 O2 . C10 H14 O5 . C8 H8 . C4 H6 O2 . C3 H5 N O)x
 CCI PMS

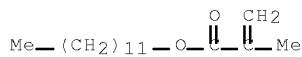
CM 2

CRN 21282-97-3
 CMF C10 H14 O5



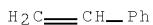
CM 3

CRN 142-90-5
 CMF C16 H30 O2

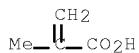


CM 4

CRN 100-42-5
 CMF C8 H8



CM 5

CRN 79-41-4
CMF C4 H6 O2

CM 6

CRN 79-06-1
CMF C3 H5 N O

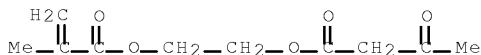
RN 324576-21-8 HCPLUS

CN Butanoic acid, 3-oxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with butyl 2-propenoate, 1,2-ethanediyl bis(2-methyl-2-propenoate), ethenylbenzene, 2-methyl-2-propenoic acid and 2-propenamide, ammonium salt (9CI) (CA INDEX NAME)

CM 1

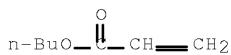
CRN 324576-20-7
CMF (C10 H14 O5 . C10 H14 O4 . C8 H8 . C7 H12 O2 . C4 H6 O2 . C3 H5 N O)x
CCI PMS

CM 2

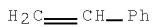
CRN 21282-97-3
CMF C10 H14 O5

CM 3

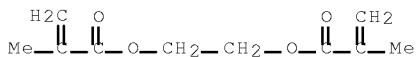
CRN 141-32-2
CMF C7 H12 O2



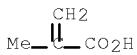
CM 4

CRN 100-42-5
CMF C8 H8

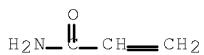
CM 5

CRN 97-90-5
CMF C10 H14 O4

CM 6

CRN 79-41-4
CMF C4 H6 O2

CM 7

CRN 79-06-1
CMF C3 H5 N O

RN 324576-27-4 HCPLUS

CN Butanoic acid, 3-oxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with butyl 2-propenoate, ethenylbenzene, 2-methyl-2-propenoic acid and 2-propenamide, ammonium salt (9CI) (CA INDEX NAME)

CM 1

10/594,519-309792-EIC SEARCH

CRN 324576-26-3

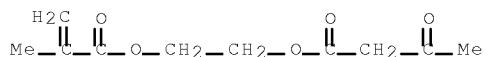
CMF (C10 H14 O5 . C8 H8 . C7 H12 O2 . C4 H6 O2 . C3 H5 N O)X

CCI PMS

CM 2

CRN 21282-97-3

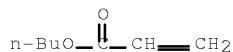
CMF C10 H14 O5



CM 3

CRN 141-32-2

CMF C7 H12 O2



CM 4

CRN 100-42-5

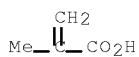
CMF C8 H8



CM 5

CRN 79-41-4

CMF C4 H6 O2



CM 6

CRN 79-06-1

CMF C3 H5 N O



RN 324576-29-6 HCAPLUS
 CN Propanedioic acid, (2-methyl-1-oxo-2-propenyl)-, diethyl ester,
 polymer with butyl 2-propenoate, ethenylbenzene,
 2-methyl-2-propenoic acid, oxiranylmethyl 2-methyl-2-propenoate
 and 2-propenamide, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 324576-28-5

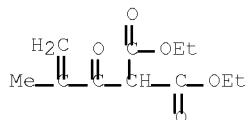
CMF (C11 H16 O5 . C8 H8 . C7 H12 O2 . C7 H10 O3 . C4 H6 O2 . C3
 H5 N O)x

CCI PMS

CM 2

CRN 4180-09-0

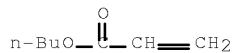
CMF C11 H16 O5



CM 3

CRN 141-32-2

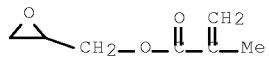
CMF C7 H12 O2



CM 4

CRN 106-91-2

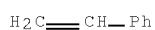
CMF C7 H10 O3



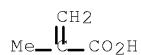
CM 5

CRN 100-42-5

CMF C8 H8



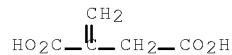
CM 6

CRN 79-41-4
CMF C4 H6 O2

CM 7

CRN 79-06-1
CMF C3 H5 N O

IT 97-65-4D, Itaconic acid, esters, polymers with styrene
 RL: TEM (Technical or engineered material use); USES (Uses)
 (ink containing; preparation and properties of printing ink composition with
 two liquid components)
 RN 97-65-4 HCPLUS
 CN Butanedioic acid, 2-methylene- (CA INDEX NAME)

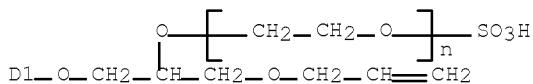


IT 324575-84-0P 324575-85-1P
 324737-84-0P, Butyl methacrylate-ethylene
 oxide-methacrylic acid-phenoxyethyl methacrylate graft copolymer
 ammonium sulfate 324737-86-2P, Benzyl
 methacrylate-butyl methacrylate-dicyclopentanyl
 dimethacrylate-ethylene oxide-methacrylic acid graft copolymer
 ammonium sulfate
 RL: IMF (Industrial manufacture); POF (Polymer in formulation);
 TEM (Technical or engineered material use); PREP (Preparation);
 USES (Uses)
 (pigment dispersion; preparation and properties of
 printing ink composition with two liquid components)
 RN 324575-84-0 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with butyl
 2-methyl-2-propenoate, 2-phenoxyethyl 2-methyl-2-propenoate and
 α -sulfo- ω -[1-[(nonylphenoxy)methyl]-2-(2-
 propenoxy)ethoxy]poly(oxy-1,2-ethanediyl) ammonium salt, graft
 (9CI) (CA INDEX NAME)

CM 1

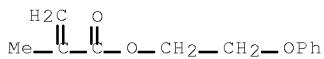
CRN 113405-85-9
CMF (C2 H4 O)n C21 H34 O6 S . H3 N

CCI IDS, PMS

D1—(CH₂)₈—Me

CM 2

CRN 10595-06-9

CMF C₁₂ H₁₄ O₃

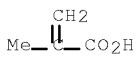
CM 3

CRN 97-88-1

CMF C₈ H₁₄ O₂

CM 4

CRN 79-41-4

CMF C₄ H₆ O₂

RN 324575-85-1 HCPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl
 2-methyl-2-propenoate, octahydro-4,7-methano-1H-inden-5-yl
 2-methyl-2-propenoate, phenylmethyl 2-methyl-2-propenoate and
 α -sulfo- ω -[1-[(nonylphenoxy)methyl]-2-(2-
 propenoxy)ethoxy]poly(oxy-1,2-ethanediyl) ammonium salt, graft

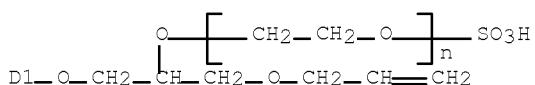
(9CI) (CA INDEX NAME)

CM 1

CRN 113405-85-9

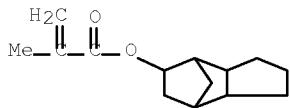
CMF (C₂ H₄ O)_n C₂₁ H₃₄ O₆ S . H₃ N

CCI IDS, PMS

D1—(CH₂)₈—Me● NH₃

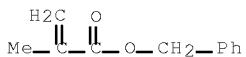
CM 2

CRN 34759-34-7

CMF C₁₄ H₂₀ O₂

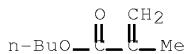
CM 3

CRN 2495-37-6

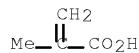
CMF C₁₁ H₁₂ O₂

CM 4

CRN 97-88-1

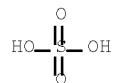
CMF C₈ H₁₄ O₂

CM 5

CRN 79-41-4
CMF C4 H6 O2

RN 324737-84-0 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with butyl
 2-methyl-2-propenoate, oxirane and 2-phenoxyethyl
 2-methyl-2-propenoate, hydrogen sulfate, graft, ammonium salt
 (9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9
CMF H2 O4 S

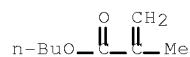
CM 2

CRN 324737-83-9
CMF (C12 H14 O3 . C8 H14 O2 . C4 H6 O2 . C2 H4 O)x
CCI PMS

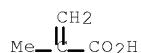
CM 3

CRN 10595-06-9
CMF C12 H14 O3

CM 4

CRN 97-88-1
CMF C8 H14 O2

CM 5

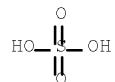
CRN 79-41-4
CMF C4 H6 O2

CM 6

CRN 75-21-8
CMF C2 H4 O

RN 324737-86-2 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with butyl
 2-methyl-2-propenoate, octahydro-4,7-methano-1H-indene-5,?-diyl
 bis(2-methyl-2-propenoate), oxirane and phenylmethyl
 2-methyl-2-propenoate, hydrogen sulfate, graft, ammonium salt
 (9CI) (CA INDEX NAME)

CM 1

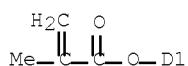
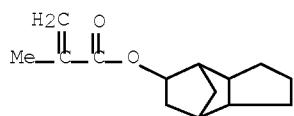
CRN 7664-93-9
CMF H2 O4 S

CM 2

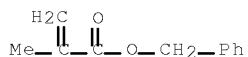
CRN 326926-42-5
CMF (C18 H24 O4 . C11 H12 O2 . C8 H14 O2 . C4 H6 O2 . C2 H4 O)x
CCI PMS

CM 3

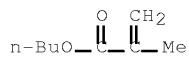
CRN 107293-48-1
CMF C18 H24 O4
CCI IDS



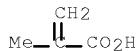
CM 4

CRN 2495-37-6
CMF C11 H12 O2

CM 5

CRN 97-88-1
CMF C8 H14 O2

CM 6

CRN 79-41-4
CMF C4 H6 O2

CM 7

CRN 75-21-8
CMF C2 H4 OIC ICM B41M005-00
ICS B41J003-04; C09D011-00

CC 42-12 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 73

IT **Dispersing agents**
 Dispersion (of materials)

Dyes
 Emulsifying agents
 Emulsions

Light stabilizers

Pigments, nonbiological

Surfactants

UV stabilizers
 (ink containing; preparation and properties of printing ink composition with two liquid components)

IT 25085-34-1, Acrylic acid-styrene copolymer 35209-54-2, Acrylic acid-styrene copolymer ammonium salt
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (dispersing agent, ink containing; preparation and properties of printing ink composition with two liquid components)

IT 25155-30-0, Sodium dodecylbenzenesulfonate
 RL: NUU (Other use, unclassified); USES (Uses)
 (emulsifier, ink containing; preparation and properties of printing ink composition with two liquid components)

IT 151-21-3, Sodium laurylsulfate, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (emulsifier; preparation and properties of printing ink composition with two liquid components)

IT 26636-08-8P, 2-Ethylhexyl acrylate-methacrylic acid-styrene copolymer 232935-02-3P, Acrylamide-acrylic acid-ADK Stab LA 82-butyl acrylate-RUVA 93-styrene copolymer ammonium salt 324575-78-2P 324575-80-6P 324575-82-8P 324575-89-5P, Butyl acrylate-2-hydroxyethyl acrylate-1,6-hexanediol dimethacrylate-methacrylic acid-styrene copolymer ammonium salt 324575-91-9P, Acrylamide-lauryl methacrylate-methacrylic acid-styrene copolymer ammonium salt 324575-93-1P, Acrylamide-butyl acrylate-ethylene glycol dimethacrylate-methacrylic acid-styrene copolymer ammonium salt 324575-95-3P 324575-97-5P, Acrylamide-butyl acrylate-diethylene glycol dimethacrylate-methacrylic acid-styrene copolymer ammonium salt 324575-98-6P, Acrylamide-butyl acrylate-glycidyl methacrylate-methacrylic acid-styrene copolymer ammonium salt 324576-00-3P, Butyl acrylate-methacrylic acid-styrene-trifluoroethyl methacrylate copolymer ammonium salt 324576-03-6P, Acrylamide-butyl acrylate-ethylene glycol dimethacrylate-heptadecafluorodecyl methacrylate-methacrylic acid-styrene copolymer ammonium salt 324576-06-9P, 2-Acryloylamino-2-methylpropanesulfonic acid-butyl acrylate-diethylene glycol dimethacrylate-2,2,3,4,4,4-hexafluorobutyl methacrylate-styrene copolymer ammonium salt 324576-08-1P, Acrylamide-butyl acrylate-methacrylic acid-styrene-2,2,3,3-tetrafluoropropyl methacrylate copolymer ammonium salt 324576-10-5P, Acrylamide-butyl acrylate-glycidyl methacrylate-methacrylic acid-perfluoroctylethyl methacrylate-styrene copolymer ammonium salt 324576-13-8P, Acrylamide-ethylene glycol dimethacrylate-methacrylic acid-methyl methacrylate-styrene-trifluoroethyl methacrylate copolymer ammonium salt 324576-16-1P, Butyl acrylate-methacryloyldiacetyl methane-methacrylic acid-styrene copolymer ammonium salt 324576-18-3P, 2-Acetoacetoxyethyl methacrylate-acrylamide-lauryl methacrylate-methacrylic acid-styrene copolymer ammonium salt 324576-21-8P, 2-Acetoacetoxyethyl methacrylate-acrylamide-butyl acrylate-ethylene glycol dimethacrylate-methacrylic acid-styrene copolymer ammonium salt 324576-24-1P 324576-27-4P, 2-Acetoacetoxyethyl

methacrylate-acrylamide-butyl acrylate-methacrylic acid-styrene copolymer ammonium salt 324576-29-6P, Acrylamide-butyl acrylate-diethyl methacryloylmalonate-glycidyl methacrylate-methacrylic acid-styrene copolymer ammonium salt
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(emulsion, ink containing; preparation and properties of printing ink composition with two liquid components)

IT 79-41-4D, Methacrylic acid, esters, polymers 37-88-4D, Itaconic acid, esters, polymers with styrene 100-42-5D, Styrene, polymers with (meth)acrylates 9002-88-4, Polyethylene 9003-07-0, Polypropylene 9003-20-7, Poly(vinyl acetate) 9003-53-6, Polystyrene 9010-86-0, Ethyl acrylate-ethylene copolymer 24937-78-8, Ethylene-vinyl acetate copolymer 25300-64-5, Maleic acid-styrene copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(ink containing; preparation and properties of printing ink composition with two liquid components)

IT 324575-83-9P 324575-84-0P 324575-85-1P
324575-86-2P 324575-87-3P 324737-82-8P, Acrylonitrile-ethylene oxide graft copolymer, ammonium sulfate 324737-84-0P, Butyl methacrylate-ethylene oxide-methacrylic acid-phenoxyethyl methacrylate graft copolymer ammonium sulfate 324737-86-2P, Benzyl methacrylate-butyl methacrylate-dicyclopentanyl dimethacrylate-ethylene oxide-methacrylic acid graft copolymer ammonium sulfate 324737-88-4P, 2-Acrylamido-2-methylpropanesulfonic acid-acrylonitrile-benzyl methacrylate-butyl methacrylate-ethylene oxide graft copolymer ammonium sulfate 324737-90-8P, Acrylonitrile-dibutyl fumarate-ethylene oxide graft copolymer ammonium sulfate
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(pigment dispersion; preparation and properties of printing ink composition with two liquid components)

OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L83 ANSWER 16 OF 28 HCPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2000:107083 HCPLUS Full-text
DOCUMENT NUMBER: 132:153520
TITLE: Paper sizing agent and paper coated with the same
INVENTOR(S): Yokotani, Kenji; Torigoe, Noriaki
PATENT ASSIGNEE(S): Arakawa Chemical Industries, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000045196	A	20000215	JP 1998-228696	1998 0728
<--				
JP 4147630	B2	20080910	JP 1998-228696	1998
PRIORITY APPLN. INFO.:				

<--

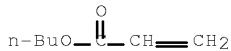
ED Entered STN: 15 Feb 2000
 AB The agent comprises (1) paper sizing agent, (2) the carboxyl-containing polyacrylamide and (3) water-sol . Al compound (Al sulfate). Thus, a sizing agent was prepared by emulsion polymerization styrene 45, Bu acrylate 10, methacrylic acid 45% in H2O containing K persulfate and neutralization with 28% NH3.
 IT 58479-10-0P, Butyl acrylate-methacrylic acid-styrene copolymer ammonium salt 219687-26-0P
 RL: IMF (Industrial manufacture); POF (Polymer in formulation);
 TEM (Technical or engineered material use); PREP (Preparation);
 USES (Uses)
 (paper sizing agent and paper coated with the same)
 RN 58479-10-0 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate and ethenylbenzene, ammonium salt (CA INDEX NAME)

CM 1

CRN 25036-16-2
 CMF (C8 H8 . C7 H12 O2 . C4 H6 O2)x
 CCI PMS

CM 2

CRN 141-32-2
 CMF C7 H12 O2



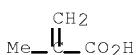
CM 3

CRN 100-42-5
 CMF C8 H8



CM 4

CRN 79-41-4
 CMF C4 H6 O2

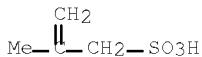


RN 219687-26-0 HCPLUS
 CN Butanedioic acid, 2-methylene-, polymer with 2-propenamide and sodium 2-methyl-2-propene-1-sulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 1561-92-8

CMF C4 H8 O3 S . Na

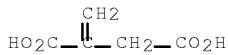


● Na

CM 2

CRN 97-65-4

CMF C5 H6 O4



CM 3

CRN 79-06-1

CMF C3 H5 N O



IC ICM D21H019-20

CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)

Section cross-reference(s): 42

IT Polymerization

(emulsion; paper sizing agent and paper coated with the same)

IT 9003-06-9P, Acrylamide-acrylic acid copolymer 26022-09-3P, Maleic anhydride-styrene copolymer ammonium salt 26590-08-9P, Diisobutylene-maleic anhydride copolymer ammonium salt 58479-10-0P, Butyl acrylate-methacrylic acid-styrene copolymer ammonium salt 149935-58-0P 219587-26-0P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(paper sizing agent and paper coated with the same)

L83 ANSWER 17 OF 28 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2000:105287 HCAPLUS Full-text

DOCUMENT NUMBER: 132:139004

TITLE: Water-based polyacrylamide-type coatings and coated papers thereof

INVENTOR(S): Yokotani, Kenji; Torikoshi, Noriaki

PATENT ASSIGNEE(S): Arakawa Chemical Industries, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000045197	A	20000215	JP 1998-228697	1998 0728
JP 4147631	B2	20080910	JP 1998-228697	1998 0728

PRIORITY APPLN. INFO.:

ED Entered STN: 15 Feb 2000

AB The coatings comprise solns. containing surface sizing agents, polyacrylamides bearing CO₂H, starches, water-soluble Al compds., and chelating agents. Thus, 20 parts of a 3%-solid solution of 45:10:45 styrene-Bu acrylate-methacrylic acid copolymer ammonium salt and 40 parts of a 3%-solid solution of 94.9:5.1 acrylamide-acrylic acid copolymer Na salt were mixed with 3.6 parts of a 3% Al₂(SO₄)₃ solution and 1000 parts of a 10% solution of an oxidized starch (Oji Ace A) then diluted to 2.5% to give a coating. Raw papers for newspapers were coated with the coating, dried at 100°, and kept at 20° and 65% RH for a day to give test pieces having min. naps after printing, low solubility of the coating in water, and good sizing property.

IT 58479-10-0, Butyl acrylate-methacrylic acid-styrene copolymer ammonium salt

RL: IMF (Industrial manufacture); MOA (Modifier or additive use);
PREP (Preparation); USES (Uses)
(water-based polyacrylamide-type coatings for coated papers)

RN 58479-10-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate and ethenylbenzene, ammonium salt (CA INDEX NAME)

CM 1

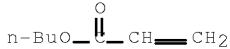
CRN 25036-16-2

CMF (C₈ H₈ . C₇ H₁₂ O₂ . C₄ H₆ O₂)_x

CCI PMS

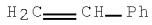
CM 2

CRN 141-32-2

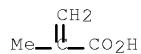
CMF C₇ H₁₂ O₂

CM 3

CRN 100-42-5

CMF C₈ H₈

CM 4

CRN 79-41-4
CMF C4 H6 O2IT 257277-33-1⁹RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(water-based polyacrylamide-type coatings for coated papers)

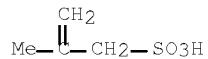
RN 257277-33-1 HCPLUS

CN Butanedioic acid, 2-methylene-, polymer with 2-propenamide and sodium 2-methyl-2-propene-1-sulfonate (1:1), sodium salt (CA INDEX NAME)

CM 1

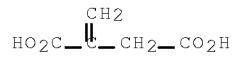
CRN 219687-26-0
CMF (C5 H6 O4 . C4 H8 O3 S . C3 H5 N O . Na)x
CCI PMS

CM 2

CRN 1561-92-8
CMF C4 H8 O3 S . Na

● Na

CM 3

CRN 97-65-4
CMF C5 H6 O4

CM 4

CRN 79-06-1
CMF C3 H5 N O

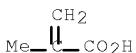
IC ICM D21H019-20
 ICS D21H019-10; D21H019-12
 CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)
 Section cross-reference(s): 42
 IT 26022-10-6P 58479-10-0P, Butyl acrylate-methacrylic acid-styrene copolymer ammonium salt 257282-32-9P
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use);
 PREP (Preparation); USES (Uses)
 (water-based polyacrylamide-type coatings for coated papers)
 IT 25987-30-8P, Acrylamide-acrylic acid copolymer sodium salt
 149935-58-0P 257277-33-1P
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (water-based polyacrylamide-type coatings for coated papers)

L83 ANSWER 18 OF 28 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2000:60032 HCAPLUS Full-text
 DOCUMENT NUMBER: 132:109529
 TITLE: Water-based recording liquids and ink-jet recording process thereof
 INVENTOR(S): Miyabayashi, Toshiyuki; Yatake, Masahiro
 PATENT ASSIGNEE(S): Seiko Epson Corp., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

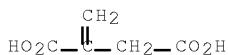
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000026779	A	20000125	JP 1998-192131	1998 0707
<--				
JP 1998-192131				
1998 0707				
<--				

PRIORITY APPLN. INFO.:

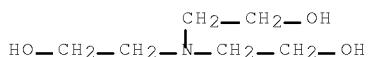
ED Entered STN: 26 Jan 2000
 AB The liqs. contain pigments or disperse dyes, water, water-soluble organic solvents, and optionally surfactants and/or glycol ethers, polymer fine particles, and alkaline agents and have storage modulus in 0.01-10 Hz 1 + 10-1 Pz in dynamic viscoelastic determination at strain 1.0 and ζ potential at pH 6.5-11.5 \leq 20 mV. The liquid show excellent pigment dispersion stability and storage stability. Thus, an ink-jet ink contained carbon black (MA 7) 6, styrene-acrylic acid copolymer 1, glycerin 20, NaOH 0.1%, and balance water.
 IT 79-41-40, Methacrylic acid, esters, polymers
 97-65-40, Itaconic acid, esters, polymer with styrene
 102-71-6, Triethanolamine, uses 111-42-2,
 Diethanolamine, uses 141-43-5, Monoethanolamine, uses 26007-37-4, Itaconic acid-styrene copolymer
 RL: TEM (Technical or engineered material use); USES (Uses)
 (in water-based ink-jet inks with good pigment dispersion stability and storage stability)
 RN 79-41-4 HCAPLUS
 CN 2-Propenoic acid, 2-methyl- (CA INDEX NAME)



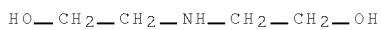
RN 97-65-4 HCPLUS
 CN Butanedioic acid, 2-methylene- (CA INDEX NAME)



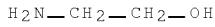
RN 102-71-6 HCPLUS
 CN Ethanol, 2,2',2'''-nitrilotris- (CA INDEX NAME)



RN 111-42-2 HCPLUS
 CN Ethanol, 2,2'-iminobis- (CA INDEX NAME)



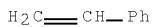
RN 141-43-5 HCPLUS
 CN Ethanol, 2-amino- (CA INDEX NAME)



RN 26007-37-4 HCPLUS
 CN Butanedioic acid, 2-methylene-, polymer with ethenylbenzene (CA INDEX NAME)

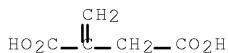
CM 1

CRN 100-42-5
 CMF C8 H8



CM 2

CRN 97-65-4
 CMF C5 H6 O4



IC ICM C09D011-02
 ICS B41J002-01; B41M005-00
 CC 42-12 (Coatings, Inks, and Related Products)
 IT Surfactants
 (amphoteric; in water-based ink-jet inks with good pigment
 dispersion stability and storage stability)
 IT Surfactants
 (anionic; in water-based ink-jet inks with good pigment
 dispersion stability and storage stability)
 IT Polyamides, uses
 Polyesters, uses
 Polysiloxanes, uses
 Polyurethanes, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (in water-based ink-jet inks with good pigment
 dispersion stability and storage stability)
 IT Inks
 (jet-printing, water-thinned; water-based ink-jet inks with
 good pigment dispersion stability and storage
 stability)
 IT Surfactants
 (nonionic; in water-based ink-jet inks with good pigment
 dispersion stability and storage stability)
 IT 74-85-1D, Ethylene, polymer with (meth)acrylic acid ester
 75-50-3, Trimethylamine, uses 79-10-7D, Acrylic acid, esters,
 polymers 79-41-4D, Methacrylic acid, esters, polymers
 97-68-4D, Itaconic acid, esters, polymer with styrene
 100-37-8, Diethyl ethanolamine 100-42-5D, Styrene, polymer with
 (meth)acrylic acid ester 102-71-6, Triethanolamine,
 uses 102-79-4, Butyl diethanolamine 108-01-0, Dimethyl
 ethanolamine 109-83-1, Monomethyl ethanolamine 110-16-7D,
 Maleic acid, esters, polymer with styrene 111-42-2,
 Diethanolamine, uses 112-34-5, Diethylene glycol monobutyl ether
 112-59-4, Diethylene glycol monohexylether 121-44-8,
 Triethylamine, uses 122-20-3, Triisopropanolamine 126-86-3,
 Surfynol 104 141-43-5, Monoethanolamine, uses
 143-22-6, Triethylene glycol monobutyl ether 585-88-6, Maltitol
 1310-58-3, Potassium hydroxide, uses 1310-65-2, Lithium
 hydroxide 1310-73-2, Sodium hydroxide, uses 6168-72-5
 7664-41-7, Ammonia, uses 9003-17-2, Polybutadiene 9003-20-7,
 Poly(vinyl acetate) 9003-31-0, Polyisoprene 9003-53-6,
 Polystyrene 9003-55-8, Styrene-butadiene copolymer 14002-34-7,
 Tripropanol amine 18912-81-7, Diethylene glycol monopentyl ether
 24937-78-8, Ethylene-vinyl acetate copolymer 25014-31-7, Poly
 (α -methylstyrene) 25085-34-1, Styrene-acrylic acid
 copolymer 25300-64-5, Styrene-maleic acid copolymer
 25961-89-1, Triethylene glycol monohexylether 25961-91-5,
 Triethylene glycol monopentyl ether 28007-37-4,
 Itaconic acid-styrene copolymer 29387-86-8, Propylene glycol
 monobutyl ether 35884-42-5, Dipropylene glycol monobutyl ether
 85305-25-5, Dipropanol amine 197530-05-5 228263-99-8
 228264-01-5 228264-03-7 228264-05-9 228264-09-3
 228264-11-7 228264-83-3 228264-84-4 228264-85-5
 228264-86-6 255393-50-1, Joncrys 352
 RL: TEM (Technical or engineered material use); USES (Uses)
 (in water-based ink-jet inks with good pigment
 dispersion stability and storage stability)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE
 THIS RECORD (1 CITINGS)

L83 ANSWER 19 OF 28 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1999:380802 HCAPLUS Full-text
 DOCUMENT NUMBER: 131:20212
 TITLE: Improving shape stability of cellulosic fiber cloth
 INVENTOR(S): Nakaoka, Yoshihiko
 PATENT ASSIGNEE(S): Takemoto Oil and Fat Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

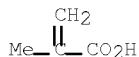
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11158773	A	19990615	JP 1997-343880	1997 1127
<--				
PRIORITY APPLN. INFO.: JP 1997-343880				
<--				
<--				

ED Entered STN: 21 Jun 1999
 AB Improving shape stability of cellulosic fiber cloth with no formaldehyde occurring comprises treatment of the cloth with a water-soluble vinyl polymer crosslinking agent and an inorg. salt. Thus, acrylic acid 360, 2-hydroxyethyl methacrylate 45, sodium methallylsulfonate 45 parts were polymerized to give a water-soluble polymer, 70 parts of which was mixed with 30 parts of sodium phosphate to treat cotton knit fabric, showing shrinkage <3%, good creaseproofing, softening and color change resistance.
 IT 226218-85-5P, Ammonium methacrylate-2-hydroxyethyl methacrylate-sodium methallylsulfonate copolymer
 226218-86-6P, Acrylic acid-2-hydroxyethyl methacrylate-itaconic acid Triethanolamine salt-sodium methallylsulfonate copolymer 226218-87-7P, Acrylic acid-2-hydroxyethyl methacrylate-ammonium methacrylate-sodium methallylsulfonate copolymer
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (improving shape stability of cellulosic fiber cloth)
 RN 226218-85-5 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with ammonium 2-methyl-2-propenoate and sodium 2-methyl-2-propene-1-sulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 16325-47-6

CMF C4 H6 O2 . H3 N



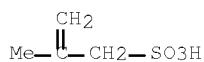
● NH3

CM 2

CRN 1561-92-8

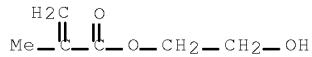
10/594,519-309792-EIC SEARCH

CMF C4 H8 O3 S . Na



● Na

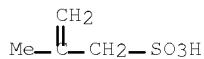
CM 3

CRN 868-77-9
CMF C6 H10 O3

RN 226218-86-6 HCAPLUS

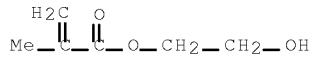
CN Butanedioic acid, methylene-, compd. with
2,2',2'''-nitrilotris[ethanol] (1:1), polymer with 2-hydroxyethyl
2-methyl-2-propenoate, 2-propenoic acid and sodium
2-methyl-2-propene-1-sulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 1561-92-8
CMF C4 H8 O3 S . Na

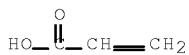
● Na

CM 2

CRN 868-77-9
CMF C6 H10 O3

CM 3

CRN 79-10-7
CMF C3 H4 O2

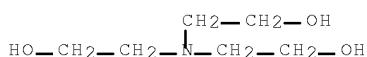


CM 4

CRN 61839-16-5
 CMF C6 H15 N O3 . C5 H6 O4

CM 5

CRN 102-71-6
 CMF C6 H15 N O3



CM 6

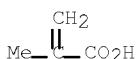
CRN 97-65-4
 CMF C5 H6 O4



RN 226218-87-7 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with ammonium 2-methyl-2-propenoate, 2-propenoic acid and sodium 2-methyl-2-propene-1-sulfonate (9CI) (CA INDEX NAME)

CM 1

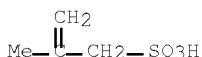
CRN 16325-47-6
 CMF C4 H6 O2 . H3 N



● NH3

CM 2

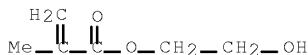
CRN 1561-92-8
 CMF C4 H8 O3 S . Na



● Na

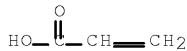
CM 3

CRN 868-77-9
CMF C6 H10 O3



CM 4

CRN 79-10-7
CMF C3 H4 O2



IC ICM D06M015-267

ICS C08F222-06; C08F290-06

CC 40-9 (Textiles and Fibers)

IT 165174-72-1P, Acrylic acid-polyethylene glycol methyl ether methacrylate-sodium methallylsulfonate copolymer 226218-83-3P, Acrylic acid-2-hydroxyethyl methacrylate-sodium methallylsulfonate copolymer 226218-85-5P, Ammonium methacrylate-2-hydroxyethyl methacrylate-sodium methallylsulfonate copolymer 226218-86-6P, Acrylic acid-2-hydroxyethyl methacrylate-itaconic acid Triethanolamine salt-sodium methallylsulfonate copolymer 226218-87-7P, Acrylic acid-2-hydroxyethyl methacrylate-ammonium methacrylate-sodium methallylsulfonate copolymer 226218-89-9P, Maleic acid-methyl methacrylate-sodium styrenesulfonate copolymer 226218-90-2P 226218-91-3P, Acrylic acid-polyethylene glycol phenyl ether methacrylate-sodium styrenesulfonate copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(improving shape stability of cellulosic fiber cloth)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L83 ANSWER 20 OF 28 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:115995 HCAPLUS Full-text

DOCUMENT NUMBER: 128:218469

ORIGINAL REFERENCE NO.: 128:43265a,43268a

TITLE: Aqueous pigmented inks with long storage stability and providing high density printed image

INVENTOR(S): Sakuma, Tadashi; Ishii, Masuki; Yanagi,

10/594,519-309792-EIC SEARCH

Hideki; Suzuki, Shoichi; Wakabayashi, Shigemi;

Tsujii, Yoshiaki; Aida, Kenji

PATENT ASSIGNEE(S):

Kao Corp., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10046083	A	19980217	JP 1996-210263	1996 0808
				<--
JP 1996-210263				1996 0808
				<--

PRIORITY APPLN. INFO.:

<--

JP 1996-210263

1996
0808

<--

ED Entered STN: 26 Feb 1998

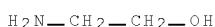
AB Title inks comprise pigments, polymeric dispersants, water-soluble solvents, and water, where the polymer dispersants have weight-average mol. weight 5000-200000 and are copolymers of 10-50 parts of alkylene oxide adduct monomer CH₂:CXCOY [X = H, Me, CH₂CO₂(R₁O)_nR₂, CH₂CONR₃R₄; R₁ = C₂-3 alkylene; R₂ = H, C₁-3 alkyl; R₃ = (R₁O)_pR₂; R₄ = (R₁O)_qR₂; n, p, q = 1-300; Y = O(R₁O)_nR₂, NR₃R₄] and 50-90 parts of other monomers.

IT 141-43-8, uses 203983-85-1

RL: TEM (Technical or engineered material use); USES (Uses)
(aqueous pigmented inks with long storage stability and providing high d. printed image)

RN 141-43-5 HCPLUS

CN Ethanol, 2-amino- (CA INDEX NAME)



RN 203983-85-1 HCPLUS

CN Butanedioic acid, methylene-, diammonium salt, polymer with α -hydro- ω -hydroxypoly(oxy-1,2-ethanediyl) ester ether with 4-[bis(2-hydroxyethyl)amino]-2-methylene-4-oxobutanoic acid (3:1) 1-methyl ether (9CI) (CA INDEX NAME)

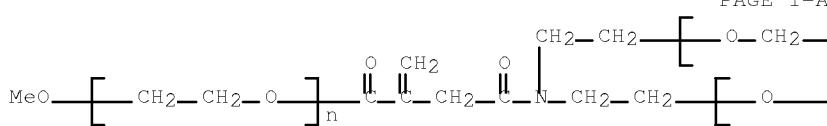
CM 1

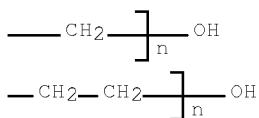
CRN 203983-84-0

CMF (C₂ H₄ O)_n (C₂ H₄ O)_n C₁₀ H₁₇ N O₅

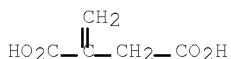
CCI PMS

PAGE 1-A





CM 2

CRN 7580-68-9
CMF C5 H6 O4 . 2 H3 N

●2 NH3

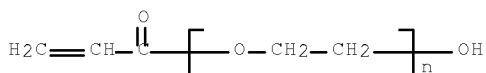
IT 203983-83-9, Itaconic acid-polyethylene glycol monoacrylate copolymer 204201-88-8, Disodium itaconate-polypropylene glycol monomethyl ether methacrylate copolymer

RL: TEM (Technical or engineered material use); USES (Uses)
(polymer dispersant; aqueous pigmented inks with long storage stability and providing high d. printed image)

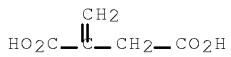
RN 203983-83-9 HCPLUS

CN Butanedioic acid, methylene-, polymer with
α-(1-oxo-2-propenyl)-ω-hydroxypoly(oxy-1,2-ethanediyl)
(9CI) (CA INDEX NAME)

CM 1

CRN 26403-58-7
CMF (C2 H4 O)n C3 H4 O2
CCI PMS

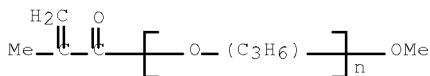
CM 2

CRN 97-65-4
CMF C5 H6 O4

RN 204201-55-8 HCAPLUS
 CN Butanedioic acid, methylene-, disodium salt, polymer with
 α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly[oxy(methyl-
 1,2-ethanediyl)] (9CI) (CA INDEX NAME)

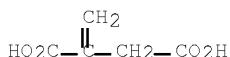
CM 1

CRN 65932-26-5
 CMF (C₃ H₆ O)_n C₅ H₈ O₂
 CCI IDS, PMS



CM 2

CRN 5363-69-9
 CMF C₅ H₆ O₄ . 2 Na

●₂ Na

IC ICM C09D011-00
 ICS C09D011-10
 CC 42-12 (Coatings, Inks, and Related Products)
 ST ink jet printing aq pigmented; vinyl oxyalkylene adduct polymer
 ink dispersant
 IT 111-46-6, Diethylene glycol, uses 141-43-8, uses
 147-14-8, C.I. Pigment Blue 15:1 80083-40-5, C.I. Pigment Red
 81:1 203983-88-1
 RL: TEM (Technical or engineered material use); USES (Uses)
 (aqueous pigmented inks with long storage stability and providing
 high d. printed image)
 IT 203983-83-9, Itaconic acid-polyethylene glycol
 monoacrylate copolymer 204201-85-8, Disodium
 itaconate-polypropylene glycol monomethyl ether methacrylate
 copolymer
 RL: TEM (Technical or engineered material use); USES (Uses)
 (polymer dispersant; aqueous pigmented inks with long
 storage stability and providing high d. printed image)

L83 ANSWER 21 OF 28 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1996:629804 HCAPLUS Full-text
 DOCUMENT NUMBER: 125:250501
 ORIGINAL REFERENCE NO.: 125:46793a, 46796a
 TITLE: Water-based pigment compositions containing
 acrylic polymer emulsions with good
 storage stability
 INVENTOR(S): Kato, Akimitsu; Kobayashi, Juichi
 PATENT ASSIGNEE(S): Pentel Kk, Japan; Pentel Co., Ltd.
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
 CODEN: JKXXAF

DOCUMENT TYPE: **Patent**
 LANGUAGE: **Japanese**
 FAMILY ACC. NUM. COUNT: **1**
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08199093	A	19960806	JP 1995-30099	1995 0126
JP 3702373	B2	20051005	JP 1995-30099	1995 0126

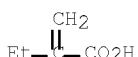
PRIORITY APPLN. INFO.:

ED Entered STN: 24 Oct 1996
 AB The compns. contain pigments, acrylate ester polymer emulsions, water-soluble solvents with high b. p., condensed naphthalenesulfonate salts, $[CH_2CR(CO_2M)]_n$ (I; R = C1-10 alkyl, n ≥ 1; M = Na, K, NH4), and H2O as essential components, and useful for water-resistant poster colors or watercolor paintings. A yellow composition containing Hansa Yellow G 10, poly(Et acrylate) emulsion 10, hydroxyethyl cellulose 0.5, glycerin 5, condensed Na naphthalenesulfonate 0.5, I (M = Na, R = Et) 0.5, H2O 33, diethanolamine 0.5, and CaCO3 40 parts showed fluidity (JIS K-5101; 10.1) 52.1 mm initially and 51.0 mm after 10 days at room temperature
 IT 182229-44-3 182229-46-5
 182229-48-7 182229-50-1
 RL: MOA (Modifier or additive use); USES (Uses)
 (water-based pigment compns. with good storage stability containing)
 RN 182229-44-3 HCAPLUS
 CN Butanoic acid, 2-methylene-, sodium salt, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 182229-43-2

CMF C5 H8 O2 . Na



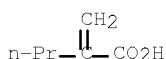
● Na

RN 182229-46-5 HCAPLUS
 CN Pentanoic acid, 2-methylene-, sodium salt, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 182229-45-4

CMF C6 H10 O2 . Na



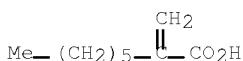
● Na

RN 182229-48-7 HCAPLUS
 CN Octanoic acid, 2-methylene-, ammonium salt, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 182229-47-6

CMF C9 H16 O2 . H3 N



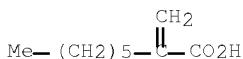
● NH3

RN 182229-50-1 HCAPLUS
 CN Octanoic acid, 2-methylene-, potassium salt, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 182229-49-8

CMF C9 H16 O2 . K



● K

IC ICM C09D005-06
 ICS C09D017-00; C09D133-02; C09D133-08
 CC 42-6 (Coatings, Inks, and Related Products)
 ST water based pigment compn storage stability; poster color pigment
 compn storage stability; painting pigment compn water based;
 acrylate ester polymer emulsion pigment compn; polyethyl
 acrylate emulsion pigment compn; naphthalenesulfonate
 salt pigment compn storage stability; gelation prevention water
 based pigment compn
 IT Pigments
 (water-based acrylate polymer emulsions with good
 storage stability containing)
 IT Emulsions
 (water-based; pigment compns. containing acrylate polymers,
 condensed naphthalenesulfonate salts and
 carboxylate-substituted polymers with good storage stability)
 IT Paintings
 (watercolor, pigment compns. containing acrylic polymer

emulsions with good storage stability for)
 IT 9003-32-1, Poly(ethyl acrylate) 25852-37-3, Butyl acrylate-methyl methacrylate copolymer 27813-99-6, Butyl methacrylate-ethyl acrylate copolymer
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (emulsions; water-based pigment compns. containing condensed naphthalenesulfonate salts with good storage stability)
 IT 2512-29-0, Hansa Yellow G 5281-04-9 57455-37-5, C.I. Pigment Blue 29
 RL: TEM (Technical or engineered material use); USES (Uses)
 (pigment; water-based acrylate polymer emulsions with good storage stability containing)
 IT 182229-44-3 182229-46-5
 182229-48-7 182229-50-1
 RL: MOA (Modifier or additive use); USES (Uses)
 (water-based pigment compns. with good storage stability containing)
 IT 25155-19-5D, Naphthalenesulfonic acid, condensates, sodium salt
 RL: MOA (Modifier or additive use); USES (Uses)
 (water-based pigment compns.; containing acrylate polymer emulsions with good storage stability)

L83 ANSWER 22 OF 28 HCPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1992:129953 HCPLUS Full-text
 DOCUMENT NUMBER: 116:129953
 ORIGINAL REFERENCE NO.: 116:22033a,22036a
 TITLE: Manufacture of water-soluble ester salts of itaconic acid copolymers
 INVENTOR(S): Własiuk, Danuta; Kłopotek, Alojzy
 PATENT ASSIGNEE(S): Instytut Chemii Przemysłowej, Pol.
 SOURCE: Pol., 11 pp. Abstracted and indexed from the unexamined application.
 CODEN: POXXA7
 DOCUMENT TYPE: Patent
 LANGUAGE: Polish
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
PL 153127	B1	19910329	PL 1987-265244	1987 0417

PRIORITY APPLN. INFO.: PL 1987-265244
 1987
0417
 <--

ED Entered STN: 03 Apr 1992
 AB Products useful as complexing agents and surfactants are manufactured by partially esterifying 1-10:1-3 itaconic acid-maleic anhydride copolymers (I) with 0.01-2.5 mol C10-22 fatty alc., polyethoxylated C10-22 fatty alc. (d.p. 6-20), or polyethoxylated (C6-22-alkyl)phenol at 343-383 K and neutralizing with alkali metal hydroxides, NH3, and or alkanolamines at 293-323 K. Thus, a 130-600 I was heated in dioxane with 6 g polyethoxylated nonylphenol (d.p. 8) and stripped to give 245 g product (mol. weight 5500) which was neutralized (240 g) with 763 g 20% NaOH at 293 K to give a 38.5% solution of polymer with Ca²⁺ and Mg²⁺ complexation 82.9 and 0.9 mg/g at pH 9 and surface tension of a 0.5% aqueous solution 65 dynes/cm.

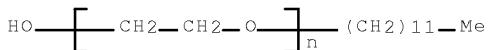
IT 139247-10-2P
 RL: PREP (Preparation)
 (manufacture of water soluble, for surfactants and complexing agents)
 RN 139247-10-2 HCPLUS
 CN Butanedioic acid, methylene-, polymer with 2,5-furandione, ester

10/594,519-309792-EIC SEARCH

with α -dodecyl- ω -hydroxypoly(oxy-1,2-ethanediyl),
potassium salt (9CI) (CA INDEX NAME)

CM 1

CRN 9002-92-0
CMF (C₂ H₄ O)_n C₁₂ H₂₆ O
CCI PMS

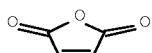


CM 2

CRN 28391-42-6
CMF (C₅ H₆ O₄ . C₄ H₂ O₃)_x
CCI PMS

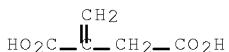
CM 3

CRN 108-31-6
CMF C₄ H₂ O₃



CM 4

CRN 97-65-4
CMF C₅ H₆ O₄



IT 139247-12-4P 139247-14-6P
139604-08-3P 139604-09-4P

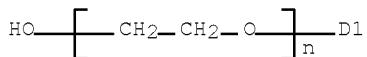
RL: PREP (Preparation)
(manufacture of water-soluble, for surfactants and
complexing agents)

RN 139247-12-4 HCAPLUS

CN Butanedioic acid, methylene-, polymer with 2,5-furandione, ester
with α -(nonylphenyl)- ω -hydroxypoly(oxy-1,2-
ethanediyl), sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 9016-45-9
CMF (C₂ H₄ O)_n C₁₅ H₂₄ O
CCI IDS, PMS



D1—(CH₂)₈—Me

CM 2

CRN 28391-42-6

CMF (C₅ H₆ O₄ . C₄ H₂ O₃)_x

CCI PMS

CM 3

CRN 108-31-6

CMF C₄ H₂ O₃



CM 4

CRN 97-65-4

CMF C₅ H₆ O₄



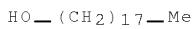
RN 139247-14-6 HCAPLUS

CN Butanedioic acid, methylene-, polymer with 2,5-furandione, octadecyl ester, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 112-92-5

CMF C₁₈ H₃₈ O



CM 2

CRN 28391-42-6

CMF (C₅ H₆ O₄ . C₄ H₂ O₃)_x

CCI PMS

10/594,519-309792-EIC SEARCH

CM 3

CRN 108-31-6
CMF C4 H2 O3



CM 4

CRN 97-65-4
CMF C5 H6 O4

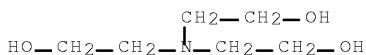


RN 139604-08-3 HCAPLUS

CN Butanedioic acid, methylene-, polymer with 2,5-furandione, ether with α -octadecyl- ω -hydroxypoly(oxy-1,2-ethanediyl), compd. with 2,2',2''-nitrilotris[ethanol] (9CI) (CA INDEX NAME)

CM 1

CRN 102-71-6
CMF C6 H15 N O3

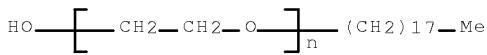


CM 2

CRN 139247-11-3
CMF (C5 H6 O4 . C4 H2 O3)x . x (C2 H4 O)n C18 H38 O

CM 3

CRN 9005-00-9
CMF (C2 H4 O)n C18 H38 O
CCI PMS



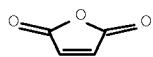
CM 4

10/594,519-309792-EIC SEARCH

CRN 28391-42-6
 CMF (C5 H6 O4 . C4 H2 O3)x
 CCI PMS

CM 5

CRN 108-31-6
 CMF C4 H2 O3



CM 6

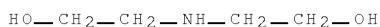
CRN 97-65-4
 CMF C5 H6 O4



RN 139604-09-4 HCAPLUS
 CN Butanedioic acid, methylene-, polymer with 2,5-furandione, dodecyl ester, compd. with 2,2'-iminobis[ethanol] (9CI) (CA INDEX NAME)

CM 1

CRN 111-42-2
 CMF C4 H11 N O2

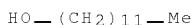


CM 2

CRN 139247-13-5
 CMF C12 H26 O . x (C5 H6 O4 . C4 H2 O3)x

CM 3

CRN 112-53-8
 CMF C12 H26 O



CM 4

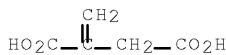
CRN 28391-42-6
 CMF (C5 H6 O4 . C4 H2 O3)x

CCI PMS

CM 5

CRN 108-31-6
CMF C4 H2 O3

CM 6

CRN 97-65-4
CMF C5 H6 O4

IC ICM C08F220-04
ICS C08F222-06
CC 35-8 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 46
IT 339247-10-2P
RL: PREP (Preparation)
(manufacture of water soluble, for surfactants and
complexing agents)
IT 139247-12-4P 139247-14-6P
139604-08-3P 139604-09-4P
RL: PREP (Preparation)
(manufacture of water-soluble, for surfactants and
complexing agents)

L83 ANSWER 23 OF 28 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1991:124811 HCAPLUS Full-text
DOCUMENT NUMBER: 114:124811
ORIGINAL REFERENCE NO.: 114:21249a,21252a
TITLE: Decomposition suppressants for basic calcium
carbonate platelets
INVENTOR(S): Nagami, Kyoichi; Saito, Fumikazu; Machida,
Masahiro
PATENT ASSIGNEE(S): Chichibu Lime Industries Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	

JP 02129020	A	19900517	JP 1988-282103	1988 1108
<--				
PRIORITY APPLN. INFO.: JP 1988-282103				1988

<--

ED Entered STN: 06 Apr 1991
 AB The title suppressants for $2\text{CaCO}_3 \cdot x\text{Ca(OH)}_2 \cdot y\text{H}_2\text{O}$ (I, $x = 0.5-1.0$; $y = 0.7-1.5$) platelets useful as paper pigments with good ink absorption are water-soluble copolymers (mol. weight 1000-50,000) of 40-99.5 mol% unsatd. carboxylic acid A1A2C:CA3CO2X1 (A1, A2 = H, Me, CO2X2, excluding A1 = A2 = CO2X1; A3 = H, Me, CH2CO2X3; when A3 = CH2X3, A1, A2 = H, Me; X1-3 = H, mono- or divalent metal, NH4, organic amine residue) and 60-0.5 mol% unsatd. (meth)allyl ether $\text{CH}_2\text{CRCH}_2\text{OCH}_2\text{CH(OH)CH}_2\text{Z}$ (R = H, Me; Z = OH, sulfo or salt, phosphoric or phosphorus acid group or salt). Thus, 100 parts I ($x = 0.63$; $y = 0.86$) stored in water with 1.6 parts 80:20 acrylic acid-3-allyloxy-2-hydroxypropanesulfonic acid copolymer Na salt (mol. weight 4000) at 80° for 48 h showed decomposition <10%.

IT 130977-98-9 130978-00-6

RL: USES (Uses)

(decomposition suppressants, for basic calcium carbonate)

RN 130977-98-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with
 3-(2-propenoxy)-1,2-propanediol, ammonium salt (9CI) (CA INDEX
 NAME)

CM 1

CRN 130977-97-8

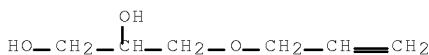
CMF (C6 H12 O3 . C4 H6 O2)x

CCI PMS

CM 2

CRN 123-34-2

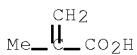
CMF C6 H12 O3



CM 3

CRN 79-41-4

CMF C4 H6 O2



RN 130978-00-6 HCAPLUS

CN Butanedioic acid, methylene-, polymer with 2-propenoic acid and
 3-(2-propenoxy)-1,2-propanediol, sodium salt (9CI) (CA INDEX
 NAME)

CM 1

CRN 130261-95-9

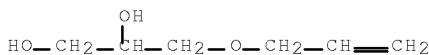
CMF (C6 H12 O3 . C5 H6 O4 . C3 H4 O2)x

CCI PMS

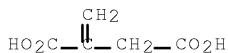
CM 2

CRN 123-34-2

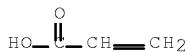
CMF C6 H12 O3



CM 3

CRN 97-65-4
CMF C5 H6 O4

CM 4

CRN 79-10-7
CMF C3 H4 O2

IC ICM C01F011-18
 ICS C08F216-14; C08F220-04; C09K015-06; C09K015-12
 CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)
 IT 104603-74-9 105062-72-4, Acrylic
 acid-3-allyloxy-2-hydroxypropanesulfonic acid copolymer sodium
 salt 125938-65-0 125938-67-2 130977-96-7
 130977-98-9 130977-99-0 130978-00-6
 130978-02-8 131026-26-1
 RL: USES (Uses)
 (decomposition suppressants, for basic calcium carbonate)

L83 ANSWER 24 OF 28 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1987:90162 HCAPLUS Full-text
 DOCUMENT NUMBER: 106:90162
 ORIGINAL REFERENCE NO.: 106:14699a,14702a
 TITLE: Anticoagulant preparation from organic acids
 and amines
 INVENTOR(S): Murashige, Yoshio; Miyagawa, Chosaku; Kawachi,
 Yasunofu; Fujimoto, Junko
 PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	

JP 61215325	A	19860925	JP 1985-56464	1985

0320

PRIORITY APPLN. INFO.:

<--
JP 1985-564641985
0320

<--

ED Entered STN: 21 Mar 1987

AB A water-soluble anticoagulant is prepared by treating a polymerizable organic acid such as acrylic acid with an amine in the presence of soluble vinyl monomer like K methacrylate. Thus, acrylic acid 7.2, K methacrylate 3.6, K allylsulfonate 3.6 g, and 12 mL H₂O were mixed and treated with 5.4 g monoethanolamine to give anticoagulant copolymer. Fresh blood (1-15 mL) mixed with 0.02 mL containing 15% weight/volume of the anticoagulant did not coagulate and did not alter the characteristics of blood corpuscles, blood platelets, etc.

IT 106704-53-4P 106704-54-5P

106704-56-7P 106704-58-9P

106704-60-3P 106704-61-4P

106704-62-5P 106704-64-7P

106704-66-9P 106704-68-1P

106704-70-5P 106704-72-7P

106704-74-9P 106704-76-1P

106704-78-3P 106704-80-7P

106704-82-9P 106704-83-0P

106705-05-9P 106705-06-0P

106705-07-1P 106705-08-2P

106726-04-9P 106726-05-0P

106726-07-2P 106726-08-3P

106771-12-4P

RL: THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)
(preparation of, as anticoagulant)

RN 106704-53-4 HCPLUS

CN 2-Propenoic acid, 2-methyl-, potassium salt, polymer with
potassium 2-propene-1-sulfonate and 2-propenoic acid, compd. with
1,3-propanediamine (9CI) (CA INDEX NAME)

CM 1

CRN 109-76-2

CMF C3 H10 N2



CM 2

CRN 106704-52-3

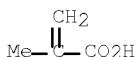
CMF (C4 H6 O2 . C3 H6 O3 S . C3 H4 O2 . 2 K)x

CCI PMS

CM 3

CRN 6900-35-2

CMF C4 H6 O2 . K



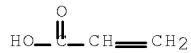
● K

CM 4

CRN 3934-13-2
CMF C3 H6 O3 S . K

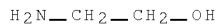
● K

CM 5

CRN 79-10-7
CMF C3 H4 O2

RN 106704-54-5 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, potassium salt, polymer with
 potassium 2-propene-1-sulfonate and 2-propenoic acid, compd. with
 2-aminoethanol (9CI) (CA INDEX NAME)

CM 1

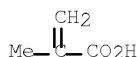
CRN 141-43-5
CMF C2 H7 N O

CM 2

CRN 106704-52-3
CMF (C4 H6 O2 . C3 H6 O3 S . C3 H4 O2 . 2 K)x
CCI PMS

CM 3

CRN 6900-35-2
CMF C4 H6 O2 . K



● K

CM 4

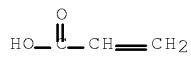
CRN 3934-13-2
CMF C3 H6 O3 S . K



● K

CM 5

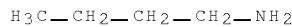
CRN 79-10-7
CMF C3 H4 O2



RN 106704-56-7 HCPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with potassium
2-methyl-2-propenoate and potassium 2-propene-1-sulfonate, compd.
with 1-butanamine (9CI) (CA INDEX NAME)

CM 1

CRN 109-73-9
CMF C4 H11 N

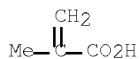


CM 2

CRN 106704-57-8
CMF (C4 H6 O2 . C4 H6 O2 . C3 H6 O3 S . 2 K)x
CCI PMS

CM 3

CRN 6900-35-2
CMF C4 H6 O2 . K



● K

CM 4

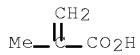
CRN 3934-13-2
CMF C3 H6 O3 S . K



● K

CM 5

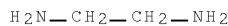
CRN 79-41-4
CMF C4 H6 O2



RN 106704-58-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with potassium
2-methyl-2-propenoate and potassium 2-propene-1-sulfonate, compd.
with 1,2-ethanediamine (9CI) (CA INDEX NAME)

CM 1

CRN 107-15-3
CMF C2 H8 N2

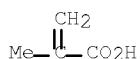


CM 2

CRN 106704-57-8
CMF (C4 H6 O2 . C4 H6 O2 . C3 H6 O3 S . 2 K)x
CCI PMS

CM 3

CRN 6900-35-2
CMF C4 H6 O2 . K



● K

CM 4

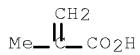
CRN 3934-13-2
CMF C3 H6 O3 S . K



● K

CM 5

CRN 79-41-4
CMF C4 H6 O2



RN 106704-60-3 HCPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with potassium
2-methyl-2-propenoate and sodium 2-propene-1-sulfonate, compd.
with 1,3-propanediamine (9CI) (CA INDEX NAME)

CM 1

CRN 109-76-2
CMF C3 H10 N2



CM 2

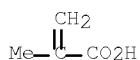
CRN 106704-59-0
CMF (C4 H6 O2 . C4 H6 O2 . C3 H6 O3 S . K . Na)x
CCI PMS

CM 3

CRN 6900-35-2

10/594,519-309792-EIC SEARCH

CMF C4 H6 O2 . K



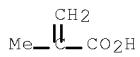
● K

CM 4

CRN 2495-39-8
CMF C3 H6 O3 S . Na

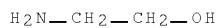
● Na

CM 5

CRN 79-41-4
CMF C4 H6 O2

RN 106704-61-4 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with potassium
 2-methyl-2-propenoate and sodium 2-propene-1-sulfonate, compd.
 with 2-aminoethanol (9CI) (CA INDEX NAME)

CM 1

CRN 141-43-5
CMF C2 H7 N O

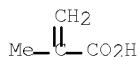
CM 2

CRN 106704-59-0
CMF (C4 H6 O2 . C4 H6 O2 . C3 H6 O3 S . K . Na)x
CCI PMS

CM 3

10/594,519-309792-EIC SEARCH

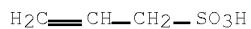
CRN 6900-35-2
 CMF C4 H6 O2 . K



● K

CM 4

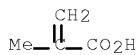
CRN 2495-39-8
 CMF C3 H6 O3 S . Na



● Na

CM 5

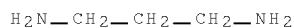
CRN 79-41-4
 CMF C4 H6 O2



RN 106704-62-5 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with potassium
 2-methyl-2-propenoate and potassium 2-propene-1-sulfonate, compd.
 with 1-butanamine, 1,2-ethanediamine and 1,3-propanediamine (9CI)
 (CA INDEX NAME)

CM 1

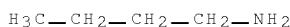
CRN 109-76-2
 CMF C3 H10 N2



CM 2

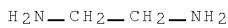
CRN 109-73-9
 CMF C4 H11 N

10/594,519-309792-EIC SEARCH



CM 3

CRN 107-15-3
CMF C2 H8 N2

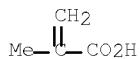


CM 4

CRN 106704-57-8
CMF (C4 H6 O2 . C4 H6 O2 . C3 H6 O3 S . 2 K)x
CCI PMS

CM 5

CRN 6900-35-2
CMF C4 H6 O2 . K



● K

CM 6

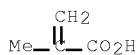
CRN 3934-13-2
CMF C3 H6 O3 S . K



● K

CM 7

CRN 79-41-4
CMF C4 H6 O2

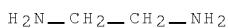


10/594,519-309792-EIC SEARCH

RN 106704-64-7 HCAPLUS
 CN Butanedioic acid, methylene-, polymer with potassium
 2-methyl-2-propenoate and potassium 2-propene-1-sulfonate, compd.
 with 1,2-ethanediamine (9CI) (CA INDEX NAME)

CM 1

CRN 107-15-3
 CMF C2 H8 N2

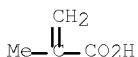


CM 2

CRN 106704-63-6
 CMF (C5 H6 O4 . C4 H6 O2 . C3 H6 O3 S . 2 K) x
 CCI PMS

CM 3

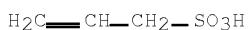
CRN 6900-35-2
 CMF C4 H6 O2 . K



● K

CM 4

CRN 3934-13-2
 CMF C3 H6 O3 S . K



● K

CM 5

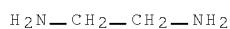
CRN 97-65-4
 CMF C5 H6 O4



RN 106704-66-9 HCAPLUS
 CN 2-Butenoic acid, polymer with potassium 2-methyl-2-propenoate and
 potassium 2-propene-1-sulfonate, compd. with 1,2-ethanediamine
 (9CI) (CA INDEX NAME)

CM 1

CRN 107-15-3
 CMF C2 H8 N2

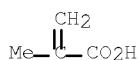


CM 2

CRN 106704-69-2
 CMF (C4 H6 O2 . C4 H6 O2 . C3 H6 O3 S . 2 K)x
 CCI PMS

CM 3

CRN 6900-35-2
 CMF C4 H6 O2 . K



● K

CM 4

CRN 3934-13-2
 CMF C3 H6 O3 S . K



● K

CM 5

CRN 3724-65-0
 CMF C4 H6 O2



RN 106704-68-1 HCAPLUS
 CN 2-Butenoic acid, polymer with potassium 2-methyl-2-propenoate,
 compd. with 1,3-propanediamine (9CI) (CA INDEX NAME)

CM 1

CRN 109-76-2
 CMF C3 H10 N2

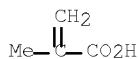


CM 2

CRN 106704-67-0
 CMF (C4 H6 O2 . C4 H6 O2 . K)x
 CCI PMS

CM 3

CRN 6900-35-2
 CMF C4 H6 O2 . K



● K

CM 4

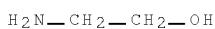
CRN 3724-65-0
 CMF C4 H6 O2



RN 106704-70-5 HCAPLUS
 CN 2-Butenoic acid, polymer with potassium 2-methyl-2-propenoate and
 potassium 2-propene-1-sulfonate, compd. with 2-aminoethanol (9CI)
 (CA INDEX NAME)

CM 1

CRN 141-43-5
 CMF C2 H7 N O

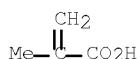


CM 2

CRN 106704-69-2
 CMF (C4 H6 O2 . C4 H6 O2 . C3 H6 O3 S . 2 K) x
 CCI PMS

CM 3

CRN 6900-35-2
 CMF C4 H6 O2 . K



● K

CM 4

CRN 3934-13-2
 CMF C3 H6 O3 S . K



● K

CM 5

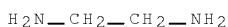
CRN 3724-65-0
 CMF C4 H6 O2



RN 106704-72-7 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with potassium
 2-methyl-2-propenoate, potassium 2-propene-1-sulfonate and
 2-propenoic acid, compd. with 1,2-ethanediamine (9CI) (CA INDEX
 NAME)

CM 1

CRN 107-15-3
 CMF C2 H8 N2



CM 2

CRN 106704-71-6

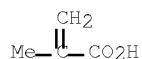
CMF (C4 H6 O2 . C4 H6 O2 . C3 H6 O3 S . C3 H4 O2 . 2 K) x

CCI PMS

CM 3

CRN 6900-35-2

CMF C4 H6 O2 . K

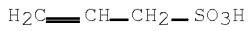


● K

CM 4

CRN 3934-13-2

CMF C3 H6 O3 S . K

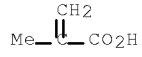


● K

CM 5

CRN 79-41-4

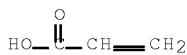
CMF C4 H6 O2



CM 6

CRN 79-10-7

CMF C3 H4 O2



RN 106704-74-9 HCAPLUS
 CN Butanedioic acid, methylene-, polymer with potassium
 2-methyl-2-propenoate, potassium 2-propene-1-sulfonate and
 2-propenoic acid, compd. with 1,3-propanediamine (9CI) (CA INDEX
 NAME)

CM 1

CRN 109-76-2
 CMF C3 H10 N2

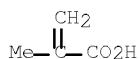


CM 2

CRN 106704-73-8
 CMF (C5 H6 O4 . C4 H6 O2 . C3 H6 O3 S . C3 H4 O2 . 2 K) x
 CCI PMS

CM 3

CRN 6900-35-2
 CMF C4 H6 O2 . K



● K

CM 4

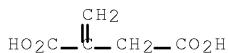
CRN 3934-13-2
 CMF C3 H6 O3 S . K



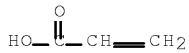
● K

CM 5

CRN 97-65-4
 CMF C5 H6 O4



CM 6

CRN 79-10-7
CMF C3 H4 O2

RN 106704-76-1 HCAPLUS
 CN 2-Butenoic acid, polymer with potassium 2-methyl-2-propenoate,
 potassium 2-propene-1-sulfonate and 2-propenoic acid, compd. with
 1-butanamine (9CI) (CA INDEX NAME)

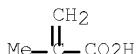
CM 1

CRN 109-73-9
CMF C4 H11 N

CM 2

CRN 106704-75-0
CMF (C4 H6 O2 . C4 H6 O2 . C3 H6 O3 S . C3 H4 O2 . 2 K) x
CCI PMS

CM 3

CRN 6900-35-2
CMF C4 H6 O2 . K

● K

CM 4

CRN 3934-13-2
CMF C3 H6 O3 S . K



● K

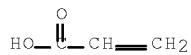
CM 5

CRN 3724-65-0
CMF C4 H6 O2



CM 6

CRN 79-10-7
CMF C3 H4 O2

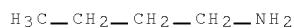


RN 106704-78-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, potassium salt, polymer with
2-propenoic acid, compd. with 1-butanamine (9CI) (CA INDEX NAME)

CM 1

CRN 109-73-9
CMF C4 H11 N

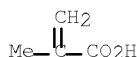


CM 2

CRN 106704-77-2
CMF (C4 H6 O2 . C3 H4 O2 . K)x
CCI PMS

CM 3

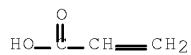
CRN 6900-35-2
CMF C4 H6 O2 . K



● K

CM 4

CRN 79-10-7
CMF C3 H4 O2



RN 106704-80-7 HCPLUS
CN 2-Butenoic acid, polymer with 2-methyl-2-propenoic acid, potassium 2-methyl-2-propenoate, potassium 2-propene-1-sulfonate and 2-propenoic acid, compd. with 1-butanamine (9CI) (CA INDEX NAME)

CM 1

CRN 109-73-9
CMF C4 H11 N

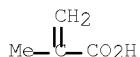


CM 2

CRN 106704-79-4
CMF (C4 H6 O2 . C4 H6 O2 . C4 H6 O2 . C3 H6 O3 S . C3 H4 O2 . 2 K) x
CCI PMS

CM 3

CRN 6900-35-2
CMF C4 H6 O2 . K



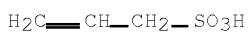
● K

CM 4

CRN 3934-13-2

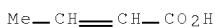
10/594,519-309792-EIC SEARCH

CMF C3 H6 O3 S . K

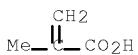


● K

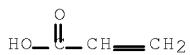
CM 5

CRN 3724-65-0
CMF C4 H6 O2

CM 6

CRN 79-41-4
CMF C4 H6 O2

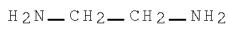
CM 7

CRN 79-10-7
CMF C3 H4 O2

RN 106704-82-9 HCAPLUS

CN Butanedioic acid, methylene-, polymer with 2-methyl-2-propenoic acid, potassium 2-methyl-2-propenoate and sodium 2-propene-1-sulfonate, compd. with 1,2-ethanediamine (9CI) (CA INDEX NAME)

CM 1

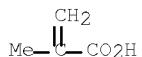
CRN 107-15-3
CMF C2 H8 N2

CM 2

CRN 106704-81-8
 CMF (C5 H6 O4 . C4 H6 O2 . C4 H6 O2 . C3 H6 O3 S . K . Na)x
 CCI PMS

CM 3

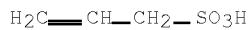
CRN 6900-35-2
 CMF C4 H6 O2 . K



● K

CM 4

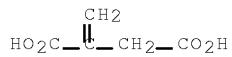
CRN 2495-39-8
 CMF C3 H6 O3 S . Na



● Na

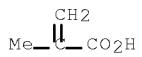
CM 5

CRN 97-65-4
 CMF C5 H6 O4



CM 6

CRN 79-41-4
 CMF C4 H6 O2



RN 106704-83-0 HCAPLUS

10/594,519-309792-EIC SEARCH

CN 2-Propenoic acid, 2-methyl-, potassium salt, polymer with
2-propenoic acid and potassium 2-propene-1-sulfonate, compd. with
1-butanamine, 1,2-ethanediamine and 1,3-propanediamine (9CI) (CA
INDEX NAME)

CM 1

CRN 109-76-2
CMF C3 H10 N2



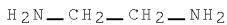
CM 2

CRN 109-73-9
CMF C4 H11 N



CM 3

CRN 107-15-3
CMF C2 H8 N2

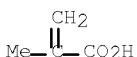


CM 4

CRN 106704-52-3
CMF (C4 H6 O2 . C3 H6 O3 S . C3 H4 O2 . 2 K)x
CCI PMS

CM 5

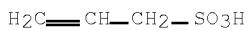
CRN 6900-35-2
CMF C4 H6 O2 . K



● K

CM 6

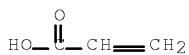
CRN 3934-13-2
 CMF C3 H6 O3 S . K



● K

CM 7

CRN 79-10-7
 CMF C3 H4 O2

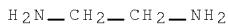


RN 106705-05-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, potassium salt, polymer with
 2-propenoic acid and potassium 2-propene-1-sulfonate, compd. with
 1,2-ethanediamine (9CI) (CA INDEX NAME)

CM 1

CRN 107-15-3
 CMF C2 H8 N2

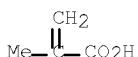


CM 2

CRN 106704-52-3
 CMF (C4 H6 O2 . C3 H6 O3 S . C3 H4 O2 . 2 K) x
 CCI PMS

CM 3

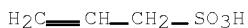
CRN 6900-35-2
 CMF C4 H6 O2 . K



● K

CM 4

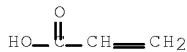
CRN 3934-13-2
 CMF C3 H6 O3 S . K



● K

CM 5

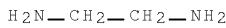
CRN 79-10-7
 CMF C3 H4 O2



RN 106705-06-0 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, potassium salt, polymer with
 2-propenoic acid and sodium 2-propene-1-sulfonate, compd. with
 1,2-ethanediamine (9CI) (CA INDEX NAME)

CM 1

CRN 107-15-3
 CMF C2 H8 N2

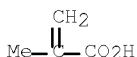


CM 2

CRN 107679-83-4
 CMF (C4 H6 O2 . C3 H6 O3 S . C3 H4 O2 . K . Na) x
 CCI PMS

CM 3

CRN 6900-35-2
 CMF C4 H6 O2 . K



● K

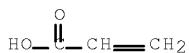
10/594,519-309792-EIC SEARCH

CM 4

CRN 2495-39-8
CMF C3 H6 O3 S . Na

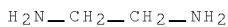
● Na

CM 5

CRN 79-10-7
CMF C3 H4 O2

RN 106705-07-1 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, potassium salt, polymer with
 2-propenoic acid, compd. with 1,2-ethanediamine (9CI) (CA INDEX
 NAME)

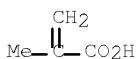
CM 1

CRN 107-15-3
CMF C2 H8 N2

CM 2

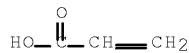
CRN 106704-77-2
CMF (C4 H6 O2 . C3 H4 O2 . K)x
CCI PMS

CM 3

CRN 6900-35-2
CMF C4 H6 O2 . K

● K

CM 4

CRN 79-10-7
CMF C3 H4 O2

RN 106705-08-2 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, potassium salt, polymer with
 potassium 2-propene-1-sulfonate and 2-propenoic acid, compd. with
 1-butanamine (9CI) (CA INDEX NAME)

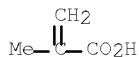
CM 1

CRN 109-73-9
CMF C4 H11 N

CM 2

CRN 106704-52-3
CMF (C4 H6 O2 . C3 H6 O3 S . C3 H4 O2 . 2 K) x
CCI PMS

CM 3

CRN 6900-35-2
CMF C4 H6 O2 . K

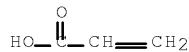
● K

CM 4

CRN 3934-13-2
CMF C3 H6 O3 S . K

● K

CM 5

CRN 79-10-7
CMF C3 H4 O2

RN 106726-04-9 HCAPLUS
 CN Butanedioic acid, methylene-, polymer with potassium
 2-methyl-2-propenoate and sodium 2-propene-1-sulfonate, compd.
 with 1,3-propanediamine (9CI) (CA INDEX NAME)

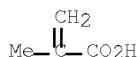
CM 1

CRN 109-76-2
CMF C3 H10 N2

CM 2

CRN 106726-03-8
CMF (C5 H6 O4 . C4 H6 O2 . C3 H6 O3 S . K . Na)x
CCI PMS

CM 3

CRN 6900-35-2
CMF C4 H6 O2 . K

● K

CM 4

CRN 2495-39-8
CMF C3 H6 O3 S . Na

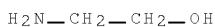
● Na

CM 5

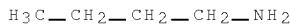
CRN 97-65-4
CMF C5 H6 O4

RN 106726-05-0 HCAPLUS
 CN Butanedioic acid, methylene-, polymer with potassium
 2-methyl-2-propenoate and potassium 2-propene-1-sulfonate, compd.
 with 2-aminoethanol and 1-butanamine (9CI) (CA INDEX NAME)

CM 1

CRN 141-43-5
CMF C2 H7 N O

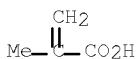
CM 2

CRN 109-73-9
CMF C4 H11 N

CM 3

CRN 106704-63-6
CMF (C5 H6 O4 . C4 H6 O2 . C3 H6 O3 S . 2 K)x
CCI PMS

CM 4

CRN 6900-35-2
CMF C4 H6 O2 . K

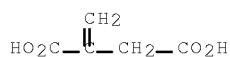
● K

CM 5

CRN 3934-13-2
CMF C3 H6 O3 S . K

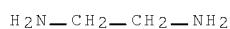
● K

CM 6

CRN 97-65-4
CMF C5 H6 O4

RN 106726-07-2 HCAPLUS
 CN Butanedioic acid, methylene-, polymer with 2-methyl-2-propenoic acid, potassium 2-methyl-2-propenoate, potassium 2-propene-1-sulfonate, 2-propenoic acid and sodium 2-propene-1-sulfonate, compd. with 1,2-ethanediamine (9CI) (CA INDEX NAME)

CM 1

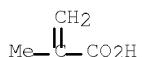
CRN 107-15-3
CMF C2 H8 N2

CM 2

CRN 106726-06-1
CMF (C5 H6 O4 . C4 H6 O2 . C4 H6 O2 . C3 H6 O3 S . C3 H6 O3 S . C3 H4 O2 . 2 K . Na)x
CCI PMS

CM 3

CRN 6900-35-2
CMF C4 H6 O2 . K



● K

CM 4

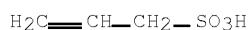
CRN 3934-13-2
CMF C3 H6 O3 S . K



● K

CM 5

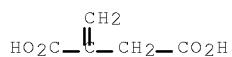
CRN 2495-39-8
CMF C3 H6 O3 S . Na



● Na

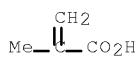
CM 6

CRN 97-65-4
CMF C5 H6 O4

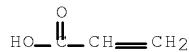


CM 7

CRN 79-41-4
CMF C4 H6 O2



CM 8

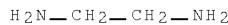
CRN 79-10-7
CMF C3 H4 O2

RN 106726-08-3 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, potassium salt, polymer with
 potassium 2-propene-1-sulfonate and 2-propenoic acid, compd. with
 1,2-ethanediamine and 1,3-propanediamine (9CI) (CA INDEX NAME)

CM 1

CRN 109-76-2
CMF C3 H10 N2

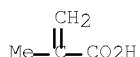
CM 2

CRN 107-15-3
CMF C2 H8 N2

CM 3

CRN 106704-52-3
CMF (C4 H6 O2 . C3 H6 O3 S . C3 H4 O2 . 2 K)x
CCI PMS

CM 4

CRN 6900-35-2
CMF C4 H6 O2 . K

● K

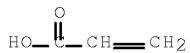
10/594,519-309792-EIC SEARCH

CM 5

CRN 3934-13-2
CMF C3 H6 O3 S . K

● K

CM 6

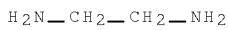
CRN 79-10-7
CMF C3 H4 O2

RN 106771-12-4 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, potassium salt, polymer with
 2-propenoic acid, compd. with 1-butanamine and 1,2-ethanediamine
 (9CI) (CA INDEX NAME)

CM 1

CRN 109-73-9
CMF C4 H11 N

CM 2

CRN 107-15-3
CMF C2 H8 N2

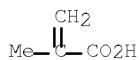
CM 3

CRN 106704-77-2
CMF (C4 H6 O2 . C3 H4 O2 . K)x
CCI PMS

CM 4

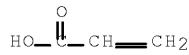
CRN 6900-35-2

CMF C4 H6 O2 . K



● K

CM 5

CRN 79-10-7
CMF C3 H4 O2

IC ICM A61K031-785
 ICA G01N033-48
 CC 63-5 (Pharmaceuticals)
 IT 106704-53-4P 106704-54-5P
 106704-56-7P 106704-58-9P
 106704-60-3P 106704-61-4P
 106704-62-5P 106704-64-7P
 106704-66-9P 106704-68-1P
 106704-70-5P 106704-72-7P
 106704-74-9P 106704-76-1P
 106704-78-3P 106704-80-7P
 106704-82-9P 106704-83-0P
 106705-05-9P 106705-06-0P
 106705-07-1P 106705-08-2P
 106726-04-9P 106726-05-0P
 106726-07-2P 106726-08-3P
 106771-12-4P
 RL: THU (Therapeutic use); BIOL (Biological study); PREP
 (Preparation); USES (Uses)
 (preparation of, as anticoagulant)

L83 ANSWER 25 OF 28 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1986:150894 HCAPLUS Full-text
 DOCUMENT NUMBER: 104:150894
 ORIGINAL REFERENCE NO.: 104:23889a,23892a
 TITLE: Dispersants for inorganic pigments
 INVENTOR(S): Kanemori, Masao; Goto, Masao
 PATENT ASSIGNEE(S): Sanyo Chemical Industries Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60181167	A	19850914	JP 1984-38944	1984 0229

10/594,519-309792-EIC SEARCH

PRIORITY APPLN. INFO.:

<--
JP 1984-389441984
0229

<--

ED Entered STN: 03 May 1986

AB A dispersant for an inorg. pigment, giving a storage-stable aqueous coating, comprises a water-soluble (meth)acrylic acid (salt) copolymer containing 0.5-50% sulfosuccinic acid (meth)allyl ester (salt). Thus, 242.6 g 40% aqueous solution of 8:2 mol ratio acrylic acid-lauryl allyl sulfosuccinate ammonium salt copolymer was mixed with 500 g CaCO₃ (average diameter 0.15 μ) to give a 68% aqueous dispersion exhibiting viscosity 300 cP initially and 310 cP after 3 days, compared with 15000 and 18000 cP, resp., when poly(acrylic acid) was used as a dispersant.IT 101124-84-9 101124-87-2
101124-90-7 101124-93-0 101124-97-4
101222-33-7 101223-33-0RL: USES (Uses)
(dispersants, for inorg. pigments, in manufacture of
storage-stable aqueous coatings)

RN 101124-84-9 HCPLUS

CN Butanedioic acid, methylene-, polymer with C-ethyl C-2-propenyl
sulfobutanedioate and 2-propenoic acid, sodium salt (9CI) (CA
INDEX NAME)

CM 1

CRN 101124-83-8

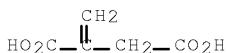
CMF (C9 H14 O7 S . C5 H6 O4 . C3 H4 O2) x

CCI PMS

CM 2

CRN 97-65-4

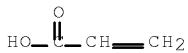
CMF C5 H6 O4



CM 3

CRN 79-10-7

CMF C3 H4 O2



CM 4

CRN 101124-82-7

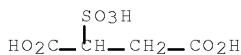
CMF C9 H14 O7 S

CCI IDS

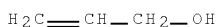
CM 5

CRN 5138-18-1

CMF C4 H6 O7 S



CM 6

CRN 107-18-6
CMF C3 H6 O

CM 7

CRN 64-17-5
CMF C2 H6 O

RN 101124-87-2 HCAPLUS

CN Butanedioic acid, methylene-, polymer with C-butyl
C-(2-methyl-2-propenyl) sulfobutanedioate and 2-propenoic acid,
sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 101124-86-1
CMF (C12 H20 O7 S . C5 H6 O4 . C3 H4 O2)x
CCI PMS

CM 2

CRN 97-65-4
CMF C5 H6 O4

CM 3

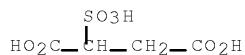
CRN 79-10-7
CMF C3 H4 O2

CM 4

CRN 101124-85-0
 CMF C12 H20 O7 S
 CCI IDS

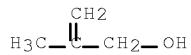
CM 5

CRN 5138-18-1
 CMF C4 H6 O7 S



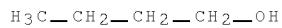
CM 6

CRN 513-42-8
 CMF C4 H8 O



CM 7

CRN 71-36-3
 CMF C4 H10 O



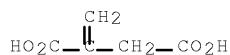
RN 101124-90-7 HCAPLUS
 CN Butanedioic acid, methylene-, C-(2-methyl-2-propenyl) C-octyl sulfobutanedioate and 2-propenoic acid, ammonium salt (9CI) (CA INDEX NAME)

CM 1

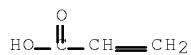
CRN 101124-89-4
 CMF (C16 H28 O7 S . C5 H6 O4 . C3 H4 O2)x
 CCI PMS

CM 2

CRN 97-65-4
 CMF C5 H6 O4



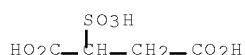
CM 3

CRN 79-10-7
CMF C3 H4 O2

CM 4

CRN 101124-88-3
CMF C16 H28 O7 S
CCI IDS

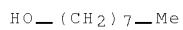
CM 5

CRN 5138-18-1
CMF C4 H6 O7 S

CM 6

CRN 513-42-8
CMF C4 H8 O

CM 7

CRN 111-87-5
CMF C8 H18 ORN 101124-93-0 HCAPLUS
CN Butanedioic acid, methylene-, polymer with C-(phenylmethyl)

10/594,519-309792-EIC SEARCH

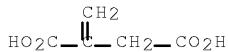
C-2-propenyl sulfobutanedioate and 2-propenoic acid, sodium salt
(9CI) (CA INDEX NAME)

CM 1

CRN 101124-92-9
CMF (C14 H16 O7 S . C5 H6 O4 . C3 H4 O2)x
CCI PMS

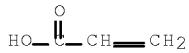
CM 2

CRN 97-65-4
CMF C5 H6 O4



CM 3

CRN 79-10-7
CMF C3 H4 O2

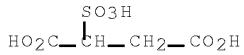


CM 4

CRN 101124-91-8
CMF C14 H16 O7 S
CCI IDS

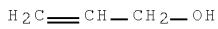
CM 5

CRN 5138-18-1
CMF C4 H6 O7 S

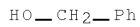


CM 6

CRN 107-18-6
CMF C3 H6 O



CM 7

CRN 100-51-6
CMF C7 H8 O

RN 101124-97-4 HCAPLUS

CN Butanedioic acid, methylene-, polymer with
 α -[1,4-dioxo-4-(2-propenyl)oxy]sulfonyl]-(ω -
 (octyloxy)poly(oxy-1,2-ethanediyl) and 2-propenoic acid, sodium
 salt (9CI) (CA INDEX NAME)

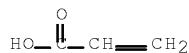
CM 1

CRN 101311-06-2
CMF (C5 H6 O4 . C3 H4 O2 . (C2 H4 O)n C15 H26 O7 S)x
CCI PMS

CM 2

CRN 97-65-4
CMF C5 H6 O4

CM 3

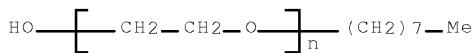
CRN 79-10-7
CMF C3 H4 O2

CM 4

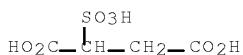
CRN 101311-05-1
CMF (C2 H4 O)n C15 H26 O7 S
CCI IDS, PMS

CM 5

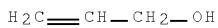
CRN 27252-75-1
CMF (C2 H4 O)n C8 H18 O
CCI PMS



CM 6

CRN 5138-18-1
CMF C4 H6 O7 S

CM 7

CRN 107-18-6
CMF C3 H6 O

RN 101222-33-7 HCAPLUS
 CN Butanedioic acid, methylene-, polymer with C-butyl C-2-propenyl sulfobutanedioate and 2-propenoic acid, sodium salt (9CI) (CA INDEX NAME)

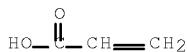
CM 1

CRN 101222-32-6
 CMF (C11 H18 O7 S . C5 H6 O4 . C3 H4 O2)x
 CCI PMS

CM 2

CRN 97-65-4
 CMF C5 H6 O4

CM 3

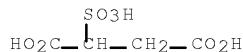
CRN 79-10-7
 CMF C3 H4 O2

CM 4

CRN 101222-29-1
 CMF C11 H18 O7 S
 CCI IDS

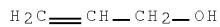
CM 5

CRN 5138-18-1
 CMF C4 H6 O7 S



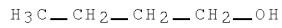
CM 6

CRN 107-18-6
 CMF C3 H6 O



CM 7

CRN 71-36-3
 CMF C4 H10 O



RN 101223-33-0 HCPLUS

CN Butanedioic acid, methylene-, polymer with C-dodecyl C-2-propenyl sulfobutanedioate and 2-propenoic acid, ammonium salt (9CI) (CA INDEX NAME)

CM 1

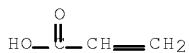
CRN 101223-32-9
 CMF (C19 H34 O7 S . C5 H6 O4 . C3 H4 O2)x
 CCI PMS

CM 2

CRN 97-65-4
 CMF C5 H6 O4



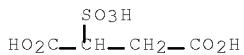
CM 3

CRN 79-10-7
CMF C3 H4 O2

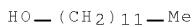
CM 4

CRN 101223-31-8
CMF C19 H34 O7 S
CCI IDS

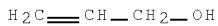
CM 5

CRN 5138-18-1
CMF C4 H6 O7 S

CM 6

CRN 112-53-8
CMF C12 H26 O

CM 7

CRN 107-18-6
CMF C3 H6 O

IC ICM C09C003-10

ICA C08L033-04

CC 42-6 (Coatings, Inks, and Related Products)

ST acrylic acid copolymer dispersant pigment; allyl sulfosuccinate copolymer dispersant pigment; calcium carbonate dispersant aq coating

IT Dispersing agents

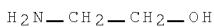
((meth)allyl sulfosuccinate copolymers, for inorg. pigments, in

manufacture of storage-stable aqueous coatings)
 IT Kaolin, uses and miscellaneous
 RL: USES (Uses)
 (dispersants for, (meth)acrylic acid copolymers as,
 in manufacture of storage-stable aqueous coatings)
 IT Pigments
 (inorg., dispersants for, methacrylic acid copolymers
 as, in manufacture of storage-stable aqueous coatings)
 IT 471-34-1, uses and miscellaneous
 RL: USES (Uses)
 (dispersants for, (meth)acrylic acid copolymers as,
 in manufacture of storage-stable aqueous coatings)
 IT 101124-84-9 101124-87-2
 101124-90-7 101124-93-0 101124-97-4
 101150-91-8 101222-31-5 101222-33-7 101222-35-9
 101223-33-0 101311-43-7
 RL: USES (Uses)
 (dispersants, for inorg. pigments, in manufacture of
 storage-stable aqueous coatings)

L83 ANSWER 26 OF 28 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1982:7631 HCAPLUS Full-text
 DOCUMENT NUMBER: 96:7631
 ORIGINAL REFERENCE NO.: 96:1389a,1392a
 TITLE: Interfacial crosslinking of latex films
 INVENTOR(S): Moore, Carl; Kirchoff, Robert A.
 PATENT ASSIGNEE(S): Dow Chemical Co., USA
 SOURCE: U.S., 11 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4293476	A	19811006	US 1979-63279	1979 0802 --
PRIORITY APPLN. INFO.:				US 1979-63279 1979 0802 --

ED Entered STN: 12 May 1984
 AB Strong, water-resistant films are prepared from aqueous dispersions of polymer
 particles having a high concentration of reactive groups on their surface, and H₂O-
 soluble compds. reactive with these groups. Thus, adding styrene 52, butadiene 28, and
 C₁₂H₂₅SH 0.2 part and AIBN 0.25, C₁₂H₂₅C₆H₄CH₂SMe₂ Cl- (I) 1, and H₂O 63 parts over 5
 h to AIBN 0.4, I 1, and H₂O 142 parts stirred at 75°, stirring 3.5 h, adding butadiene
 7, styrene 3, and ClCH₂C₆H₄CH₂ 10 parts over 2 h, and stirring 3 h at 75° gives a
 38.3% copolymer [55844-89-8] latex, number-average particle size 1340 Å. Stirring this
 latex 125.5, polyethylenimine [9002-98-6] (number-average mol. weight 40,000) 0.9, and
 C₉H₁₉C₆H₄(OCH₂CH₂)nOH 1.5 part, drying a film, and baking 5 min at 120° gives a film
 with tensile strength 164 kg/cm² and elongation 346%, compared with 65 and 520, resp.,
 without crosslinking.
 IT 341-43-\$, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (crosslinking by, of polymer latexes, interfacial)
 RN 141-43-5 HCAPLUS
 CN Ethanol, 2-amino- (CA INDEX NAME)



IT 80137-64-0
 RL: USES (Uses)
 (graft, latex, interfacial crosslinking of)
 RN 80137-64-0 HCAPLUS
 CN Butanedioic acid, methylene-, polymer with 1,3-butadiene, butyl
 2-propenoate, (chloromethyl)ethenylbenzene and ethenylbenzene
 (9CI) (CA INDEX NAME)
 CM 1
 CRN 30030-25-2
 CMF C9 H9 Cl
 CCI IDS

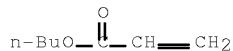


D1—CH₂—Cl

D1—CH=CH₂

CM 2

CRN 141-32-2
 CMF C₇ H₁₂ O₂



CM 3

CRN 106-99-0
 CMF C₄ H₆

H₂C=CH—CH=CH₂

CM 4

CRN 100-42-5
 CMF C₈ H₈

H₂C=CH—Ph

CM 5

CRN 97-65-4
CMF C5 H6 O4

IC C08L051-04
 INCL 260029700W
 CC 37-6 (Plastics Manufacture and Processing)
 IT 100-97-0, reactions 107-15-3, reactions 110-85-0, reactions
 112-24-3 141-43-5, reactions 9002-98-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (crosslinking by, of polymer latexes, interfacial)
 IT 80137-63-9 80137-64-0
 RL: USES (Uses)
 (graft, latex, interfacial crosslinking of)
 OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE
 THIS RECORD (3 CITINGS)
 REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE
 FOR THIS RECORD. ALL CITATIONS AVAILABLE
 IN THE RE FORMAT

L83 ANSWER 27 OF 28 HCPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1978:137999 HCPLUS Full-text
 DOCUMENT NUMBER: 88:137999
 ORIGINAL REFERENCE NO.: 88:21703a,21706a
 TITLE: Aerobically crosslinkable coating materials
 INVENTOR(S): Sunamori, Takashi; Nishii, Noboru
 PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 52127989	A	19771027	JP 1976-44637	1976 0419
US 4146588	A	19790327	US 1977-786194	1977 0411
GB 1535888	A	19781213	GB 1977-15797	1977 0415
PRIORITY APPLN. INFO.:			JP 1976-44637	A 1976 0419

ED Entered STN: 12 May 1984
 AB Aqueous dispersions of Ce(III) compds., chelate-forming compds., SmOn₂₋ (m = 1-6, n = 1-7), and water-soluble or water-dispersible vinyl compds. are stored anaerobically,

10/594,519-309792-EIC SEARCH

applied to a substrate, and crosslinked in air to form coatings. Thus, a composition of an aqueous solution containing 0.99 mol/L acrylamide and 0.01 mol/L N,N'-methylenediacrylamide 98, pyridine [110-86-1] 0.15, acrylic acid 0.15, acetylacetone [123-54-6] 0.20, 0.05 M Ce(NO₃)₃ in N HNO₃, and 5% aqueous Na₂SO₃ solution 1 mL was stored in N and applied to a rust-covered steel plate through a spray gun. The solution diffused in the rust and gelled quickly to form a copolymer [27791-59-9] coating.

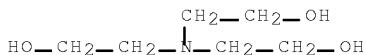
IT 102-71-6, uses and miscellaneous

RL: USES (Uses)

(acrylamide coatings containing cerous compds. and, for aerobic crosslinking)

RN 102-71-6 HCPLUS

CN Ethanol, 2,2',2'''-nitrilotris- (CA INDEX NAME)



IT 66062-73-5

RL: TEM (Technical or engineered material use); USES (Uses)
(coatings, containing cerous compds. and chelating agents as crosslinking catalysts)

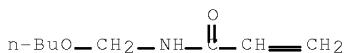
RN 66062-73-5 HCPLUS

CN Butanedioic acid, methylene-, polymer with
N-(butoxymethyl)-2-propenamide, dodecyl 2-methyl-2-propenoate,
ethenylbenzene, 2-hydroxyethyl 2-methyl-2-propenoate,
N,N'-methylenebis[2-propenamide] and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 1852-16-0

CMF C8 H15 N O2



CM 2

CRN 868-77-9

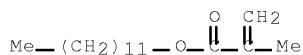
CMF C6 H10 O3



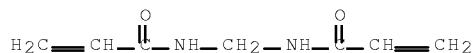
CM 3

CRN 142-90-5

CMF C16 H30 O2



CM 4

CRN 110-26-9
CMF C7 H10 N2 O2

CM 5

CRN 100-42-5
CMF C8 H8

CM 6

CRN 97-65-4
CMF C5 H6 O4

CM 7

CRN 79-06-1
CMF C3 H5 N O

IC C08F004-12
 CC 42-7 (Coatings, Inks, and Related Products)
 IT 302-71-8, uses and miscellaneous 110-86-1, uses and
 miscellaneous 123-54-6, uses and miscellaneous 7757-83-7
 RL: USES (Uses)
 (acrylamide coatings containing cerous compds. and, for aerobic
 crosslinking)
 IT 27791-59-9 66062-73-5 66072-42-2

10/594,519-309792-EIC SEARCH

RL: TEM (Technical or engineered material use); USES (Uses)
 (coatings, containing cerous compds. and chelating agents as
 crosslinking catalysts)
 OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE
 THIS RECORD (1 CITINGS)

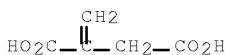
L83 ANSWER 28 OF 28 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1969:462497 HCAPLUS Full-text
 DOCUMENT NUMBER: 71:62497
 ORIGINAL REFERENCE NO.: 71:11574a
 TITLE: Inhibition of the precipitation of metal ions
 in aqueous solution
 INVENTOR(S): Carter, Richard P., Jr.; Irani, Riyad R.
 PATENT ASSIGNEE(S): Monsanto Co.
 SOURCE: Fr., 9 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 1533473	----	19680719	FR 1967-110549	1967 0615
DE 1792665	DE			<--
GB 1168718	GB			
US 3463734	US	19690826		1966 0616
<--				
PRIORITY APPLN. INFO.:				
		US		1966 0616
				<--

ED Entered STN: 12 May 1984
 AB Poly(itaconic acid) and its water-soluble salts were used as sequestering agents in
 washing composition, containing alkyl-benzenesulfonate detergents, to prevent the
 precipitation of alkaline earth and transition metal ions. A typical formulation
 consists of 20% C12H25C6H4SO3Na, 50% poly(Na itaconate), 1% Na CM-cellulose, 10% Na
 silicate, and 19% Na2SO4, and is used as a cleaning agent and as a dishwashing
 detergent.
 IT 25119-64-6 25609-79-4 25916-37-4
 26099-89-8
 RL: USES (Uses)
 (as chelating agents in detergents)
 RN 25119-64-6 HCAPLUS
 CN Butanedioic acid, 2-methylene-, homopolymer (CA INDEX NAME)

CM 1

CRN 97-65-4
 CMF C5 H6 O4



RN 25609-79-4 HCAPLUS
 CN Succinic acid, methylene-, polymers, compd. with

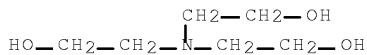
10/594,519-309792-EIC SEARCH

2,2',2'''-nitrilotriethanol (8CI) (CA INDEX NAME)

CM 1

CRN 102-71-6

CMF C6 H15 N O3



CM 2

CRN 25119-64-6

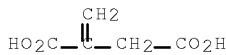
CMF (C5 H6 O4)x

CCI PMS

CM 3

CRN 97-65-4

CMF C5 H6 O4



RN 25916-37-4 HCPLUS

CN Butanedioic acid, methylene-, homopolymer, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 25119-64-6

CMF (C5 H6 O4)x

CCI PMS

CM 2

CRN 97-65-4

CMF C5 H6 O4



RN 26099-89-8 HCPLUS

CN Butanedioic acid, 2-methylene-, homopolymer, sodium salt (CA INDEX NAME)

CM 1

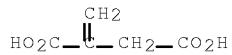
CRN 25119-64-6

CMF (C5 H6 O4)x

CCI PMS

CM 2

CRN 97-65-4
CMF C5 H6 O4



IC C11D
CC 46 (Surface Active Agents and Detergents)
IT 25119-64-6 25609-79-4 25916-37-4
26099-89-8
RL: USES (Uses)
(as chelating agents in detergents)

FULL SEARCH HISTORY

=> d his nofile

(FILE 'HOME' ENTERED AT 12:10:08 ON 28 SEP 2009)

FILE 'HCAPLUS' ENTERED AT 12:20:03 ON 28 SEP 2009
E US20070197747/PN

L1 1 SEA SPE=ON ABB=ON PLU=ON US20070197747/PN
D ALL
SEL RN
D SCA

FILE 'REGISTRY' ENTERED AT 12:22:30 ON 28 SEP 2009

L2 18 SEA SPE=ON ABB=ON PLU=ON (100-60-7/BI OR 102-71-6/BI
OR 108-91-8/BI OR 109-89-7/BI OR 110-91-8/BI OR
111-42-2/BI OR 124-30-1/BI OR 124-68-5/BI OR 137107-41-
6/BI OR 141-43-5/BI OR 35830-10-5/BI OR 471-34-1/BI OR
534-18-9/BI OR 584-10-1/BI OR 75-04-7/BI OR 864970-32-1
/BI OR 864970-33-2/BI OR 9003-04-7/BI)
D SCA

FILE 'STNGUIDE' ENTERED AT 12:22:49 ON 28 SEP 2009

FILE 'REGISTRY' ENTERED AT 12:25:30 ON 28 SEP 2009
L3 2 SEA SPE=ON ABB=ON PLU=ON L2 AND PMS/CI
D SCA
D 1-2 CI

FILE 'LREGISTRY' ENTERED AT 12:26:28 ON 28 SEP 2009

L4 STR

FILE 'REGISTRY' ENTERED AT 12:36:09 ON 28 SEP 2009

L5 SCR 2043
L6 50 SEA SSS SAM L4
D QUE STAT

FILE 'HCAPLUS' ENTERED AT 12:39:15 ON 28 SEP 2009
D SCA L1

FILE 'REGISTRY' ENTERED AT 12:39:15 ON 28 SEP 2009

E 35830-10-5/RN
L7 1 SEA SPE=ON ABB=ON PLU=ON 35830-10-5/RN,CRN
D SCA
E 9003-04-7/RN
L8 1 SEA SPE=ON ABB=ON PLU=ON 9003-04-7/RN
D SCA
D
L9 947 SEA SPE=ON ABB=ON PLU=ON 9003-01-4/CRN
L10 70415 SEA SPE=ON ABB=ON PLU=ON 79-10-7/CRN
L11 70415 SEA SPE=ON ABB=ON PLU=ON (L7 OR L8 OR L9 OR L10)
D QUE STAT L6
L12 63799 SEA SSS FUL L4
SAV TEMP L12 BER519REG/A
D SAV
L13 626916 SEA SPE=ON ABB=ON PLU=ON A1/PG
L14 5826 SEA SPE=ON ABB=ON PLU=ON L12 AND L13
L15 3961 SEA SPE=ON ABB=ON PLU=ON L12 AND ?AMMONIUM?/CNS
L16 3901 SEA SPE=ON ABB=ON PLU=ON L12 AND ?AMINE/CNS
L17 11353 SEA SPE=ON ABB=ON PLU=ON L12 AND ?SALT/CNS
L18 878 SEA SPE=ON ABB=ON PLU=ON L16 AND L17

FILE 'LREGISTRY' ENTERED AT 12:53:16 ON 28 SEP 2009

L19 STR

FILE 'REGISTRY' ENTERED AT 13:10:26 ON 28 SEP 2009

10/594,519-309792-EIC SEARCH

L20 50 SEA SUB=L12 SSS SAM L4 AND L19
 L21 22190 SEA SUB=L12 SSS FUL L4 AND L19
 SAV TEMP L21 BER519REGA/A
 L22 4666 SEA SPE=ON ABB=ON PLU=ON L15 OR L18
 L23 3023 SEA SPE=ON ABB=ON PLU=ON L16 NOT L18
 SAV TEMP L22 BER519REGB/A
 SAV TEMP L23 BER519REGC/A

FILE 'HCAPLUS' ENTERED AT 13:14:46 ON 28 SEP 2009
 L24 15704 SEA SPE=ON ABB=ON PLU=ON L21
 L25 4369 SEA SPE=ON ABB=ON PLU=ON L22
 L26 1664 SEA SPE=ON ABB=ON PLU=ON L23
 L27 16554 SEA SPE=ON ABB=ON PLU=ON L24 OR L25

FILE 'REGISTRY' ENTERED AT 13:16:30 ON 28 SEP 2009
 L28 10 SEA SPE=ON ABB=ON PLU=ON L2 AND N/ELS
 D SCA

FILE 'HCAPLUS' ENTERED AT 13:19:49 ON 28 SEP 2009
 L29 121064 SEA SPE=ON ABB=ON PLU=ON L28
 L30 16798 SEA SPE=ON ABB=ON PLU=ON L27 OR L26
 L31 329 SEA SPE=ON ABB=ON PLU=ON L29 AND L30
 L32 4618 SEA SPE=ON ABB=ON PLU=ON L25 OR L31
 L33 9577 SEA SPE=ON ABB=ON PLU=ON L14
 L34 13575 SEA SPE=ON ABB=ON PLU=ON L32 OR L33
 L35 117311 SEA SPE=ON ABB=ON PLU=ON L12
 L36 2127 SEA SPE=ON ABB=ON PLU=ON L35 AND L29
 D SCA L1
 E AMINES/CT
 L37 155818 SEA SPE=ON ABB=ON PLU=ON AMINES/CT
 L38 2197 SEA SPE=ON ABB=ON PLU=ON L35 AND L37
 L39 3984 SEA SPE=ON ABB=ON PLU=ON L36 OR L38
 D QUE STAT L33
 D QUE STAT L24
 D QUE STAT L22
 L40 8219 SEA SPE=ON ABB=ON PLU=ON L32 OR L38 OR L39
 L41 QUE SPE=ON ABB=ON PLU=ON HYDROSOLUBL? OR (HYDRO OR
 WATER OR H2O OR AQUEOUS) (A)SOLUBL?
 L42 912 SEA SPE=ON ABB=ON PLU=ON L40 AND L41
 L43 212 SEA SPE=ON ABB=ON PLU=ON L42 AND L29
 L44 147 SEA SPE=ON ABB=ON PLU=ON L42 AND L33
 L45 338 SEA SPE=ON ABB=ON PLU=ON L43 OR L44
 L46 QUE SPE=ON ABB=ON PLU=ON SUSPEN? OR DISPERS? OR
 COLLOID? OR EMULS? OR MICROEMULS? OR SLURR?
 L47 171 SEA SPE=ON ABB=ON PLU=ON L45 AND L46
 D SCA L1

FILE 'LREGISTRY' ENTERED AT 13:42:15 ON 28 SEP 2009
 L48 STR L4

FILE 'REGISTRY' ENTERED AT 13:44:26 ON 28 SEP 2009
 L49 50 SEA SUB=L12 SSS SAM L48
 L50 7985 SEA SUB=L12 SSS FUL L48
 SAV TEMP L23 BER519REGD/A
 L51 766 SEA SPE=ON ABB=ON PLU=ON L50 AND ?SODIUM?/CNS
 L52 7694 SEA SPE=ON ABB=ON PLU=ON L50 AND ACID/CNS

FILE 'HCAPLUS' ENTERED AT 13:47:37 ON 28 SEP 2009
 L53 726 SEA SPE=ON ABB=ON PLU=ON L51
 L54 13203 SEA SPE=ON ABB=ON PLU=ON L52
 L55 8 SEA SPE=ON ABB=ON PLU=ON L47 AND L53
 L56 19 SEA SPE=ON ABB=ON PLU=ON L53 AND L45
 L57 23 SEA SPE=ON ABB=ON PLU=ON L54 AND L47
 L58 66 SEA SPE=ON ABB=ON PLU=ON L54 AND L45

FILE 'REGISTRY' ENTERED AT 13:50:48 ON 28 SEP 2009
 L59 150 SEA SPE=ON ABB=ON PLU=ON L50 AND ?POTASSIUM?/CNS

FILE 'HCAPLUS' ENTERED AT 13:51:18 ON 28 SEP 2009

L60 124 SEA SPE=ON ABB=ON PLU=ON L59

L61 1 SEA SPE=ON ABB=ON PLU=ON L60 AND L47

L62 4 SEA SPE=ON ABB=ON PLU=ON L60 AND L45

L63 66 SEA SPE=ON ABB=ON PLU=ON (L55 OR L56 OR L57 OR L58)
OR (L61 OR L62)

L64 13321 SEA SPE=ON ABB=ON PLU=ON L50

L65 351 SEA SPE=ON ABB=ON PLU=ON L64 AND L29

L66 16 SEA SPE=ON ABB=ON PLU=ON L65 AND L47

L67 42 SEA SPE=ON ABB=ON PLU=ON L65 AND L45

L68 67 SEA SPE=ON ABB=ON PLU=ON L63 OR L66 OR L67

L69 QUE SPE=ON ABB=ON PLU=ON PY=<2004 NOT P/DT

L70 1 SEA SPE=ON ABB=ON PLU=ON L68 AND L69

L71 QUE SPE=ON ABB=ON PLU=ON (PY=<2004 OR PRY=<2004 OR
AY=<2004 OR MY=<2004 OR REVIEW/DT) AND P/DT

L72 44 SEA SPE=ON ABB=ON PLU=ON L68 AND L71

L73 45 SEA SPE=ON ABB=ON PLU=ON L70 OR L72

L74 23 SEA SPE=ON ABB=ON PLU=ON L73 AND ((L55 OR L56 OR
L57) OR L66)

L75 24 SEA SPE=ON ABB=ON PLU=ON L74 OR L70
SAV TEMP L75 BER519HCP/A
D SCA

L76 24 SEA SPE=ON ABB=ON PLU=ON L75 AND L41
E DISPERSING AGENTS/CT
E E3+ALL

L77 25685 SEA SPE=ON ABB=ON PLU=ON DISPERSING AGENTS/CT

L78 45 SEA SPE=ON ABB=ON PLU=ON L73 AND L41

L79 3 SEA SPE=ON ABB=ON PLU=ON L78 AND L77

L80 3 SEA SPE=ON ABB=ON PLU=ON L73 AND L77

L81 4 SEA SPE=ON ABB=ON PLU=ON L66 AND L77

L82 0 SEA SPE=ON ABB=ON PLU=ON L81 AND (L69 OR L70)

L83 28 SEA SPE=ON ABB=ON PLU=ON L76 OR (L79 OR L80 OR L81
OR L82)
SAV TEMP L83 BER519HCPA/A
D QUE STAT L83
D L83 1-28 IBIB ED ABS HITSTR HITIND